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Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)  
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Secretaría de Energía (SENER)**

## **Handbook on Environmental Permitting Issues —Project Development— Mexican Electric Sector**

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1. Guide to Prepare Preventative Notice (*IP*)
2. Documentation Required by National Water Commission (*CNA*)
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## EXECUTIVE SUMMARY

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The purpose of this *Handbook* is to serve as an authoritative resource on environmental permitting for electricity generation and transmission projects in Mexico. This resource is intended to assist developers of electricity generation and transmission projects in Mexico in understanding the latest requirements and regulations in environmental permitting. Discussions with energy companies (especially electricity utilities) active in Mexico have revealed a significant need for centralized, comprehensive and authoritative information regarding environmental permitting requirements.

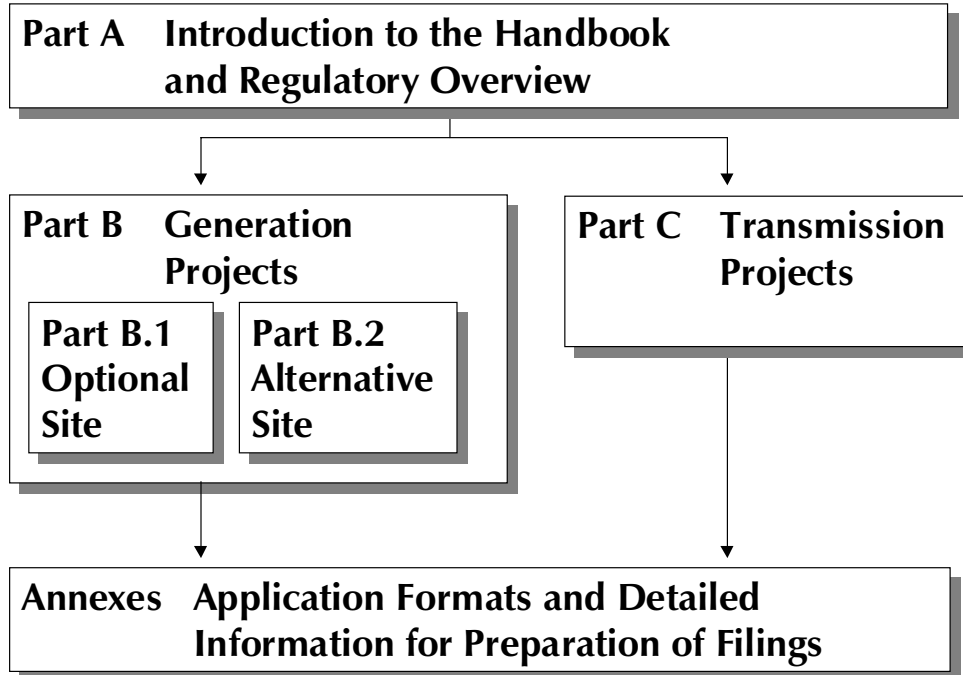
The present *Handbook* provides interested companies with a description of the permits and procedures required by several agencies on environmental issues. Given its focus on current project development and bidding activities, this *Handbook* will address thermal generation projects now being developed and bid in accordance with the independent power producer provisions of the Law on Public Service of Electric Energy (*Ley del Servicio Público de Energía Eléctrica*, or *LSPEE*), as well as private transmission projects. The other private project types contemplated under the *LSPEE*—cogeneration, self-supply and small-scale production—are not covered here, although the permitting requirements that apply to them are very similar to those described here.

This *Handbook* also includes details on recent modifications to the application forms used by the National Water Commission (*Comisión Nacional del Agua*, or *CNA*) and recent changes in the procedures for filing the environmental impact statements with the General Office of Environmental Impact and Risk (*Dirección General de Impacto y Riesgo Ambiental*, or *DGIRA*) of the Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*, or *SEMARNAT*). The *Handbook* identifies the order in which the permits must be obtained, the extent to which the environmental permits are prerequisites for obtaining other types of permits and the anticipated time required for obtaining the permits. This *Handbook* also provides detail on the fees required for executing the various procedures and securing the permits. Finally, the *Handbook* provides contact information and addresses.

Part A of the *Handbook* describes the regulatory roadmap and provides an overview of the basic permits and procedures for generation and transmission projects. Several agencies are involved in the issuance of permits at the federal, state and municipal level. For example, the *SEMARNAT* deals with the environmental issues and has control over agencies such as the *CNA* and Office of Federalization and Decentralization of Forest and Land Services, (*Dirección General de Federalización y Descentralización de Servicios Forestales y de Suelo*, or *DGFDSFS*). In addition, the State Delegations of *SEMARNAT* are responsible for issuing land-use permits that involve alteration of forested areas. Part A also contains two general overview figures for two types of sites to establish a power generation plant. The Optional Site refers to the site where the Federal Electricity Commission (*Comisión Federal de*

Figure ES–1: How to Use This Handbook

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*Electricidad*, or *CFE*) has already obtained or is in the process of obtaining different types of permits (environmental, land use, water, etc.). The Alternative Site refers to the site where the developer chooses to establish the power generation plant due to perceived strategic and economic advantages.

Part B covers in detail each of the government agencies from which the different permits required for the Optional and Alternative Sites involved in energy generation projects must be obtained. In the case of the Optional Site (Part B.1), the following five authorities are involved: *CFE*, *CNA*, *DGIRA* of *SEMARNAT*, State Delegations of *SEMARNAT* and Municipality. In the case of the Alternative Site (Part B.2), the following four authorities are involved: *CNA*, *DGIRA* of *SEMARNAT*, State Delegations of *SEMARNAT* and Municipality. For both the Optional Site and the Alternative Site, the role of each authority is covered in a specific overview figure to show the different permits involved, and each figure is accompanied by annotations to give the user an explanation of each step within the figure. In addition, the time and cost requirements of each permit are provided.

Part C reviews the requirements for transmission projects. It is assumed that the project is being implemented by a private entity under the self-supply or import/export permits. In the case of private transmission projects, all administrative responsibility rests with the developer. Part C covers three permitting processes: Overview of Permitting Process for Transmission Lines, Critical Path for the State Delegation of *SEMARNAT* and Critical Path for the *DGIRA* of *SEMARNAT*. In this

part, each of the authorities has a specific overview figure that shows the different permits involved, and each figure is accompanied by annotations to give the user an explanation of each step in the figure. The time and cost requirements of each permit are also provided.

This *Handbook* is not meant to be an exhaustive reference source. It provides the reader with a comprehensive look at the environmental permitting requirements for the electric sector in Mexico and the activities that would be required in the development and construction of electricity generation and transmission projects. In cases where more detailed data may be required, references guide the reader to the Appendices at the end of this document, the Annex (provided on CD-ROM with this *Handbook*) or to other information sources. The first-time reader should first consult the Introduction for an explanation of the contents and structure of the *Handbook*, and then review the Regulatory Overview before consulting other parts of the *Handbook*.

This *Handbook* was prepared by USAID as part of the Policy and Regulatory Support in Electric Sector and Support for Clean Technologies Deployment Program. Work proceeded in consultation with *SEMARNAT*, *CFE* and the Secretariat of Energy (*Secretaría de Energía*, or *SE*) to provide a comprehensive reference on environmental permitting issues in Mexico's electric sector.

The USAID team used three principal sources of information for the preparation of this *Handbook*:

- ◆ *Interviews with government officials.* Interviews with officials at *CFE*, *SE*, *SEMARNAT* and other federal, state and municipal agencies were the primary means of gathering the information compiled in this *Handbook*. A list of the individuals with whom interviews were conducted is included in Appendix 4.
- ◆ *Publicly available documents and forms.* All of the documentation presented in the Annex to this *Handbook* was gathered directly from the agencies contacted by the USAID team, either in printed form or through the Internet pages of those agencies.
- ◆ *Other documentation.* Other materials, such as bid documents intended for the use of participants in international tenders by *CFE* for the construction and operation of generation stations, were obtained from the relevant agencies.
- ◆ *Interviews with private sector representatives.* Interviews with representatives of firms involved in the construction and operation of generation stations in Mexico under contract with *CFE* were conducted in the preparation of this *Handbook*. Firm representatives also provided comments on drafts.

## Acronyms and Terminology

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AIA	Environmental Impact Authorization ( <i>Autorización de Impacto Ambiental</i> )
Alternative Site	Site other than the Optional Site ( <i>Sitio distinto al opcional</i> )
APP*	Accident Prevention Program ( <i>Programa de Prevención de Accidentes</i> )
BLT	Build-Lease-Transfer ( <i>Construir-Arrendar-Transferir</i> )
BOO	Build-Own-Operate ( <i>Construir-Poseer-Operar</i> )
CFC	Federal Competition Commission ( <i>Comisión Federal de Competencia</i> )
CFE	Federal Electricity Commission ( <i>Comisión Federal de Electricidad</i> )
CNA	National Water Commission ( <i>Comisión Nacional del Agua</i> )
COA	Annual Operations Certificate ( <i>Cédula de Operación Anual</i> )
CRE	Energy Regulatory Commission ( <i>Comisión Reguladora de Energía</i> )
DF	Confirmation of Water Availability ( <i>Dictamen de Factabilidad</i> )
DGDFSFS	Office of Federalization and Decentralization of Forest and Land Services ( <i>Dirección General de Federalización y Descentralización de Servicios Forestales y de Suelo</i> )
DGIRA	Office of Environmental Impact and Risk ( <i>Dirección General de Impacto y Riesgo Ambiental</i> )
DGMIC	Office of Integrated Pollutant Management ( <i>Dirección General de Manejo Integral de Contaminantes</i> )
DPW	Department of Public Works (or similar name) ( <i>Departamento de Obras Públicas [o similar]</i> )
EIA	Environmental Impact Assessment ( <i>Evaluación de Impacto Ambiental</i> )
ER	Risk Study ( <i>Estudio de Riesgo</i> )
ETJ	Technical Justification Study ( <i>Estudio Técnico-Justificativo</i> )
FNM (FF.CC.)	Mexican National Railways (also FF.CC. for “Railways”) ( <i>Ferrocarriles Nacionales Mexicanos, also Ferrocarriles</i> )
INAH	National Institute of Archaeology and History ( <i>Instituto Nacional de Arqueología e Historia</i> )

INE	National Ecology Institute ( <i>Instituto Nacional de Ecología</i> )
IP	Preventative Notice ( <i>Informe Preventivo</i> )
IPP	Independent Power Producer ( <i>Productor Independiente de Energía</i> )
LAU	Comprehensive Environmental License ( <i>Licencia Ambiental Única</i> )
LFC/LyFC	Central Light and Power (state-owned distribution company) ( <i>Luz y Fuerza del Centro</i> )
LGEEPA	General Law of Ecological Equilibrium and Environmental Protection ( <i>Ley General del Equilibrio Ecológico y la Protección al Ambiente</i> )
LSPEE	Law on Public Service of Electric Energy ( <i>Ley del Servicio Público de Energía Eléctrica</i> )
MIA	Environmental Impact Statement ( <i>Manifestación de Impacto Ambiental</i> )
NOM	Official Mexican Standard ( <i>Norma Oficial Mexicana</i> )
OPF	Publicly Financed Turn-key Projects ( <i>Obra Pública Financiada</i> )
Optional Site	Optional Site ( <i>Sitio opcional</i> )
PAC	Accident Response Plan ( <i>Plan de Atención a Contingencias</i> )
PEMEX	Mexico's national oil company ( <i>Petróleos Mexicanos</i> )
PPA	Power Purchase Agreement ( <i>Contrato de Compra-Venta de Energía</i> )
PROFEPA	Office of the Attorney General for Environmental Protection ( <i>Procuraduría Federal para la Protección al Ambiente</i> )
RDA	Registry of Water Rights ( <i>Registro de Derechos de Agua</i> )
RIA	Regulation on Environmental Impact ( <i>Reglamento del Impacto Ambiental</i> )
RFN	National Forest Inventory ( <i>Registro Forestal Nacional</i> )
SCT	Secretariat of Communications and Transportation ( <i>Secretaría de Comunicaciones y Transportes</i> )
SE	Secretariat of Economy (formerly Commerce and Industrial Development) ( <i>Secretaría de Economía [anteriormente, Comercio y Fomento Industrial]</i> )
SECODAM	Secretariat of (Financial) Control and Administrative Development ( <i>Secretaría de Controloría y Desarrollo Administrativo</i> )
SEDENA	Secretariat of National Defense ( <i>Secretaría de la Defensa Nacional</i> )

SEMARNAP	Secretariat of Environment, Natural Resources and Fisheries (1995–2000) ( <i>Secretaría de Medio Ambiente, Recursos Naturales y Pesca [1995–2000]</i> )
SEMARNAT	Secretariat of Environment and Natural Resources (2001–) ( <i>Secretaría de Medio Ambiente y Recursos Naturales [2001–]</i> )
SENER	Secretariat of Energy ( <i>Secretaría de Energía</i> )
SES	State Secretariat of Health ( <i>Secretaría Estatal de Salud</i> )
SG	Secretariat of the Interior (Internal Rule) ( <i>Secretaría de Gobernación</i> )
SHCP	Secretariat of Finance and Public Debt ( <i>Secretaría de Hacienda y Crédito Público</i> )
SS	Secretariat of Health ( <i>Secretaría de Salud</i> )
STPS	Secretariat of Labor and Social Security ( <i>Secretaría de Trabajo y Previsión Social</i> )

\* APP is used in English to avoid confusion with PPA, Power Purchase Agreement. All other abbreviations in this English version of the *Handbook* are the same as the Spanish acronym in an effort to maintain consistency.

### ***Terminology of Permitting Activities***

The terms employed by different agencies in Mexico are not necessarily consistent, and may be rendered in several different ways in English. In the interest of consistency and ease of evaluation, the following terms have been selected for use in this *Handbook*. In the critical path diagrams and accompanying annotations, the following terms are used:

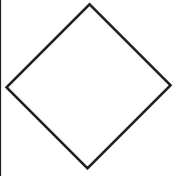
Application	Most commonly <i>solicitud</i> . It is a document prepared by the developer, including statements and other supporting materials, and submitted to a government agency or other institution as part of an administrative procedure.
Certificate	Variously referred to as a <i>certificado</i> or <i>constancia</i> . It is a document received by the developer containing results of a laboratory test, inspection, review or other independent measurement or verification performed for an entity seeking a permit, and in accordance with specified regulations, as a prerequisite for the completion of an administrative process for issuing a permit, concession or other form of authorization.



Concession	Generally, <i>concesión</i> or <i>asignación</i> . It is a document received by the developer that gives holder the right to use a water resource, land, installation or other asset that is legally property of the federal government or an <i>ejido</i> (communal landholding).
Filing	Often referred to as <i>registro</i> . A filing contains documents presented by the developer to a government agency to inform that agency of compliance with a regulation, provide relevant contact information or notify the agency of a change in activities.
Permit	Includes terms <i>permiso</i> , <i>resolución</i> , <i>cédula</i> , <i>licencia</i> and <i>autorización</i> . It is a document received by the developer from a government agency that contains a ruling or authorization, with or without instructions or special conditions, for the permit holder to undertake a specified activity for a specific period of time.
Receipt	Includes the terms <i>recibo</i> and <i>constancia de pago</i> . It is a document received by the developer from the cashier's office or similar area of a government agency that confirms receipt of payment of fees, fines or other monetary obligations required from the receipt holder for completing a permit, inspection, review or other administrative procedure.
Right of Way	Usually <i>derecho de vía</i> or <i>derecho de paso</i> . It is a document received by the developer from an agency of the federal, municipal or state government, or a private entity or <i>ejido</i> , extending the right to construct a gas or other fuel pipeline, water pipeline, road, or electricity transmission line across a specific area of land, waterway, road, railroad or maritime area.
Statement	Variously referred to as <i>manifestación</i> , <i>declaración</i> or <i>informe</i> . It is a document presented by the developer to a government agency as part of an administrative procedure that contains specific information regarding the developer's compliance, or planned compliance, with regulations.
Title	Variously referred to as <i>escritura</i> or <i>título de propiedad</i> . It is a document received by the developer as part of the acquisition or purchase of property that describes the specific attributes of that asset and establishes the legal right of the titleholder to that property.

## **Index of Graphic Conventions**

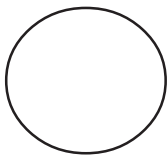
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Decision Point: Developer must decide on subject identified in text inside the triangle.



Administrative Procedure: Developer must complete activity identified inside the box.



Administrative Response: Receipt of formal communication from a government agency.



## FOREWORD

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The objective of this *Handbook* is to record the current environmental permitting requirements for new electric generation and transmission projects in a user-friendly format that serves as a reference and management tool for companies active in Mexico's electric sector.

As such, this *Handbook* is part of the long-standing and fruitful collaboration between the U.S. Agency for International Development (USAID) and the energy sector in Mexico on a range of issues, including regulatory matters. A 1997 study on cross-border interconnection issues<sup>1</sup> prepared by USAID, Mexico's Federal Electricity Commission (*Comisión Federal de Electricidad*, or *CFE*) and the Salt River Project Agricultural Improvement and Power District in Phoenix, Arizona, addressed the regulatory issues in the United States and Mexico shaping the development of cross-border electric transmission infrastructure.

In the two years following publication of that study, Mexico's electric sector experienced increasing private sector activity, largely driven by accelerating requirements at *CFE* for new generation capacity. In discussions with private developers in Mexico, as well as officials at *CFE*, it was apparent that private developers from the United States, as well as other countries, needed a comprehensive source of information on the regulatory requirements for new generation and transmission facilities in Mexico. The requirements surrounding environmental and natural resource permits were of particular interest.

In 1999, Juan Carlos Belausteguigoitia, Undersecretary for Planning at the then Secretariat of Environment, Natural Resources and Fisheries (*Secretaría de Medio Ambiente, Recursos Naturales y Pesca*, or *SEMARNAP*) requested that USAID prepare a guide on environmental permitting requirements. This proposal enjoyed the support of then Undersecretary of Energy Jorge Chávez Presa, as well as officials at *CFE*. In November 1999, USAID initiated work on this *Handbook* in collaboration with several agencies. In particular, USAID's team consulted with the Energy Regulatory Commission (*Comisión Reguladora de Energía*, or *CRE*), the Office of Investment Promotion of the Secretariat of Energy (*Secretaría de Energía*, then *SE*, now *SENER*), and the National Commission for Energy Conservation (*Comisión Nacional para el Ahorro de Energía*, or *CONAE*), as well as *CFE*. The team worked closely with the National Institute of Ecology (*Instituto Nacional de Ecología*, or *INE*), the National Water Commission (*Comisión Nacional del Agua*, or *CNA*) and the Office of Soil Recovery and Conservation (*Dirección General para la Recuperación y Conservación de Suelos*, or *DGDFSFS*), all of which are part of *SEMARNAT*. In addition to the environmental issues covered in this *Handbook*, a separate handbook on other regulatory and legal issues was also prepared.

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<sup>1</sup> USAID, SRP and CFE. *Study on Legal and Regulatory Factors Affecting Cross-Border Trade in Electricity between Mexico and the United States*. Washington, DC: USAID, January 1997.

Following review by *SEMARNAT* and *CFE* of a preliminary draft in October 2000, the USAID team prepared a revised version that was circulated to a private-sector review committee as well as *CFE* and the now renamed Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*, or *SEMARNAT*) in April 2001. The private-sector review committee incorporated representatives of six companies active in Mexico's electric sector and a law firm: AES México, Electricité de France, Spain's Unión Fenosa, El Paso Energía México, Public Service of New Mexico, Calpine, and the law office Vera, Burguete y Celis. In addition to comments from this review committee, the USAID team received comments from *CFE*, *CRE* and *SEMARNAT*.

The present version of the *Handbook* reflects all comments that were received from these reviewers, and includes to the greatest extent possible the administrative changes implemented by the administration of President Vicente Fox, with the publication of the new internal regulation from *SEMARNAT* on June 4, 2001. However, given the fact that some details of these administrative changes were not available at the time of publication, and still others may be issued in the future, discrepancies between the procedures described here and actual requirements will inevitably appear. As a result, this *Handbook* is necessarily a work in progress, and will require periodic updating. In addition, the reader is cautioned that the material presented in this *Handbook* cannot be construed as constituting formal directions by the regulatory agencies cited here, nor can USAID be held liable for the consequences of any action or inaction on the part of users of this *Handbook*.

## **PART A. INTRODUCTION**

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Part A describes the regulatory roadmap and includes an overview of the basic permits and procedures for electricity generation or transmission projects. Several agencies are involved in the issuance of permits at the federal, state and municipal level. For example, the Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*, or **SEMARNAT**) deals with the environmental issues and has control over agencies such as the National Water Commission (*Comisión Nacional del Agua*, or **CNA**) and the Office of Federalization and Decentralization of Forest and Land Services (*Dirección General de Recuperación y Conservación de Suelos*, or **DGDFSFS**). In addition, the State Delegations of **SEMARNAT** are responsible for issuing land-use permits that involve alteration of forested areas. Part A also contains two general overview figures that detail the steps involved in the permitting process for the Optional and Alternative Sites. The Optional Site refers to the site where the Federal Electricity Commission (*Comisión Federal de Electricidad*, or **CFE**) has already obtained or is in the process of obtaining different types of permits (environmental, land use, water, etc.). The Alternative Site refers to the site where the developer chooses to establish the power generation plant, instead of the Optional Site, because of strategic and economic advantages.

This *Handbook* describes basic procedures for environmental permitting that have emerged during the course of construction of generation and transmission projects in Mexico since 1995, including those projects that are being constructed under long-term contracts awarded by **CFE** to private companies through competitive bids. The **CFE** bid documents used in the preparation of this *Handbook* included the majority of projects issued for bids during 1999. These projects are known as Independent Power Producer or **IPP** projects in the *Ley del Servicio Público de Energía Eléctrica (LSPEE)*.<sup>2</sup>

Procedures for the three other types of privately developed generation projects permitted under **LSPE**—self-supply, cogeneration and small-scale production—are not covered in this *Handbook*, but are similar to those established for the **IPP** projects bid by **CFE**.<sup>3</sup> To date, only a relatively small number of self-supply and cogeneration projects have been constructed. In the case of transmission projects, there is one standard procedure established by **CFE** with **SEMARNAT** and local authorities. To date, only a handful of private transmission lines have been constructed.

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<sup>2</sup> Published in the *Diario Oficial de la Nación*, December 22, 1975, with modifications published in the *DO*, December 23, 1992.

<sup>3</sup> See Part A.2 for a detailed description of the four types of generation projects as defined in the **LSPEE**.

## ***Who Should Use This Handbook?***

This *Handbook* is directed to representatives of companies who may be considering participation in the Mexican energy sector, either through a bid issued by the *CFE* or in a project undertaken strictly on a private basis. This *Handbook* is intended to provide an understanding of the requirements in Mexico, irrespective of whether firms will undertake the permitting process by themselves or with external support. In addition, this *Handbook* is also intended to aid government officials in the United States and Mexico who are concerned with promoting growth in Mexico's energy sector.

The presentations contained in Parts A, B and C are designed for review by senior managers who need to understand the general requirements of the process, but who are not going to be actively engaged in the oversight and execution of the permitting process. The Annex contains more detailed material for those managers who will be actively engaged in the permitting process and who therefore should have knowledge of Spanish (the majority of this material is in Spanish).

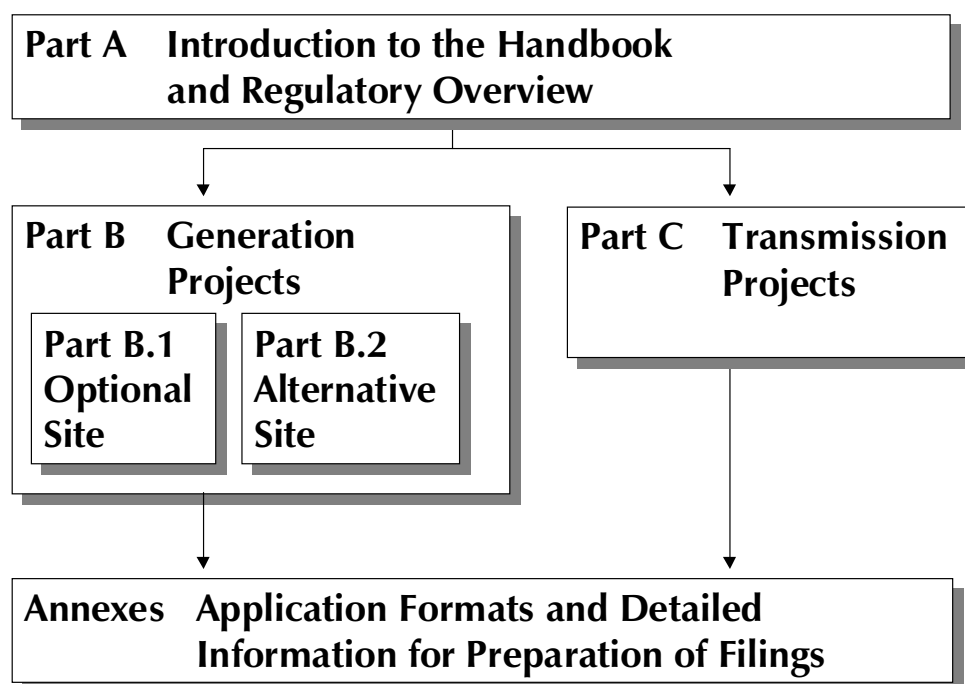
## ***How to Use This Handbook***

This *Handbook* has been designed for use as a reference resource. As a result, every effort has been made to facilitate the identification and review of specific sections of the document. In addition, every effort has been made to provide all relevant information in each of the segments of the *Handbook* to minimize the need for laborious cross-referencing. Accordingly, the reader who reviews the document from beginning to end may note some repetition. This reflects the fact that different project types require many of the same permitting procedures.

The first-time reader should begin with this section, the Introduction, for an explanation of the contents and structure of the *Handbook*, and then review the Regulatory Overview section before consulting other parts of the *Handbook* (see Figure 1). After reviewing Part A, and depending on the type of project under development, the reader should then refer to Part B (Generation) or Part C (Transmission). Part B contains two sections: Part B.1, which covers the requirements for the Optional Site offered by *CFE* to bidders, and Part B.2, which covers the requirements under the Alternative Site scenario. Part C addresses the requirements for transmission projects, under either of the relevant circumstances (*CFE* bid or non-connected project). The sections in Part B.1, B.2 or Part C may be read in their entirety for a complete description of all the permitting processes required in each case, or the reader may consult a specific section to review the requirements and process required by a specific agency.

After developing an understanding of the requirements for each particular case, the reader may then consult the Annex, which contains the relevant regulations and rulemakings as well as detailed material describing the requirements for specific filings, guidelines for their preparation and related issues. Since this material

**Figure 1: How to Use This Handbook**



is drawn directly from the Internet sites and brochures of the relevant agencies, it is in Spanish. It is expected that readers using this section will be actively involved in securing permits for projects, and will therefore have sufficient knowledge of Spanish to understand this material.

### ***Structure of the Handbook***

The two sections in Part A provide an initial orientation for the reader. Beyond the contents and structure of the *Handbook*, Part A provides an overview of the basic procedures and principles involved in the environmental permitting process for electric sector projects. Section A.1., Regulatory Overview, addresses the relationship between the environmental permits and the broader set of requirements that do not involve environmental or natural resources issues.

The technical sections of the *Handbook* are contained in Parts B and C. Each part has been divided into sections describing the permitting requirements of a specific agency. Each section consists of an overview description, a Critical Path Diagram or flow-chart and a set of annotations to the Critical Path Diagram. Where necessary, the text in the annotations refers the reader to the appropriate Appendix or section of the Annex. The annotations' section provides relevant detail for the Critical Path Diagram and is organized so that the reader can follow the process chronologically from start to finish (with some variations due to cases where multiple activities must be completed simultaneously).

Part B contains two possible scenarios for permitting generation projects. The two scenarios reflect the options that the *CFE* provides bidders for *IPP* projects with respect to site selection. The Optional Site is selected by *CFE* and put at the disposition of the bidder. An Alternative Site (in Spanish, *sitio distinto al opcional* or “site other than the optional [site]”) may be selected by the bidder. The permitting requirements are identical for an Optional Site and an Alternative Site. The distinction lies in the respective responsibilities of the developer and *CFE* in obtaining the required permits.

**Part B.1** Independent Producer—Optional Site scenario. In this case, responsibility is divided between *CFE* and the winner of the *CFE*-sponsored bid for updating certain authorizations issued by *SEMARNAT*, as well as obtaining the remainder of the required permits from *CNA*, the Energy Regulatory Commission (*Comisión Reguladora de Energía*, or *CRE*), the Secretariat of Labor and Social Security (*Secretaría de Trabajo y Provisión Social*, or *STPS*) and local authorities, and for maintaining all necessary permits and licenses during operation.

**Part B.2** Independent Producer—Alternative Site scenario. Here, the winner of a *CFE*-administered bid has opted to propose a site other than the one identified by *CFE*, and is responsible for most of the initial permitting activities normally performed by *CFE* in the Optional Site scenario.

Both scenarios are presented in detail with a Critical Path Diagram and accompanying annotations describing each of the steps, with descriptions and references, contact information, cost and approximate time required to complete the procedure. Where appropriate, the forms needed to apply for specific permits have been included in the Annex.

Part C describes the permitting requirements that apply for transmission projects. In this case, there is no distinction between types of sites largely because the *CFE* has tended to undertake these projects on a turn-key basis, with privately constructed lines being undertaken at the sole discretion of private entities. As a result, the developer has the exclusive responsibility for completing all permitting requirements in transmission projects.

Finally, the *Handbook* includes a series of Appendices that contain information about the individuals interviewed in the preparation of this *Handbook*, how to contact the relevant government agencies and other relevant material. The Appendices include the following:

- Appendix 1: Summary of Permitting Requirements
- Appendix 2: Organizational Charts of Mexican Government Agencies
- Appendix 3: Directory of Mexican Government Agencies
- Appendix 4: Key Contacts and Interviews



The separate Annex contains documentation on the technical requirements for many of the forms mentioned in the *Handbook*, as well as the actual application forms required if a specific form has been prepared by the relevant agency. In certain cases, as will be noted in the *Handbook*, there is no set application form, only required content. The Annex is divided into sections according to agency and permitting requirement.

The Annex includes the following sections:

1. Guide to prepare the Preventative Notice (*Informe Preventivo*, or **IP**)
2. Documentation required by **CNA**
3. Format required by the **CNA**
4. Guidelines of the General Law of Ecological Equilibrium and Environmental Protection (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*, **LGEEPA**)
5. Guide to prepare the Environmental Impact Statement (*Manifestación de Impacto Ambiental*, or **MIA**) in the Particular Case for Projects of Generation, Transmission and Transformation of Electric Energy
6. Guide to elaborate the **MIA** in the Regional Case for Projects of Generation, Transmission and Transformation of Electric Energy
7. Requirements and activities for the generation, transmission and transformation of electric energy
8. Guide for the Risk Study (*Estudio de Riesgo*, or **ER**)
9. Examples of Land Use Permit requirements (Nuevo León, Chihuahua, Coahuila, Tamaulipas)
10. Examples of Construction Permit requirements (Nuevo León, Chihuahua, Coahuila, Tamaulipas)
11. Permit for Change of Land Use in Forested Areas
12. Comprehensive Environmental License (*Licencia Ambiental Unica*, **LAU**)
13. Annual Operations Certificate (*Cédula de Operación Anual*, **COA**)
14. Principal Environmental Laws and Regulations (References)





## **A.1. Regulatory Overview**

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There are two major areas of environmental permitting detailed in this *Handbook*: (1) environmental impact permits and (2) permits to utilize natural resources, primarily water and land. Both permit types are issued by agencies within *SEMARNAT*, which is the branch of the federal government that deals with environmental issues.

- ◆ On environmental impact issues, the Office of Environmental Impact and Risk (*Dirección General de Impacto y Riesgo Ambiental*, or **DGIRA**) of *SEMARNAT* is the lead agency in Mexico. Until June 2001,<sup>4</sup> this function was handled by the Office of Ecological Zoning and Environmental Impact (*Dirección General de Ordenamiento Ecológico e Impacto Ambiental*) of the National Ecology Institute (*Instituto Nacional de Ecología*, or **INE**). In addition, the delegates of *SEMARNAT* in each state are becoming increasingly involved in the administration of environmental impact issues. As federal authorities, they have jurisdiction over electricity sector projects. They are also familiar with local issues and concerns due to their presence in each state and close working relationships with state and local authorities. The *SEMARNAT* delegates will only refer a project to *SEMARNAT* in Mexico City in special cases.
- ◆ With respect to natural resources, water issues are handled by *CNA*. Land use is addressed by the local agencies charged with zoning and registration of land ownership, as well as the State Delegations of *SEMARNAT*, which are responsible for issuing land-use change permits for projects that will involve alteration of forested areas.

It is important to note that state and municipal authorities play an important part in the permitting process even though electric sector projects are a matter of federal jurisdiction. Perhaps the most decisive way in which local authorities are involved is through the issuance of land-use permits for the projects. The land-use permit is a prerequisite for obtaining the environmental permit, and certainly the construction permit, for a given project. (See Appendix 2 for organizational charts for the federal government of Mexico.)

### **A.1.1. Distinction between the Optional Site and the Alternative Site in CFE-Sponsored Bids**

There are four general mechanisms for private investment in electric generation in Mexico, as stipulated by *LSPEE*: independent production (*producción independiente*); self-supply (*autoabastecimiento*); cogeneration (*cogeneración*); and small-scale production (*pequeña producción*). The most important of these mechanisms for the pur-

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<sup>4</sup> See the *Diario Oficial*, June 4, 2001.

poses of this *Handbook* is independent production (IPP<sup>5</sup>), which has been subjected to competitive, international bids administered by *CFE*. To date, *CFE* has provided bidders two options for *IPP* projects with respect to site selection. The so-called Optional Site is the site selected by *CFE* and put at the disposition of the bidder. An Alternative Site may be selected by the bidder. The permitting requirements are identical for both the Optional and Alternative Site. The distinction lies in the respective responsibilities of the developer and *CFE* in obtaining the required permits.

- ◆ The Independent Producer—Optional Site scenario. In this case, *CFE* secures a number of initial permits, considers these permits as part of the bidding process and then transfers responsibility for completing them to the winner of the *CFE*-administered bid. The winning bidder is responsible for obtaining the remainder of the required environmental permits from *CNA*, *SEMARNAT*, *CRE*, *STPS* and local authorities, and for maintaining all necessary permits and licenses during operation. Since the scope and details of the winning bid may differ from *CFE*'s original estimation of the details of the facility, the winning bidder may need to update the initial environmental permits acquired by *CFE* based on particular project requirements specified in the winning proposal. If major changes were made to the initial project, the developer may have to initiate a new permitting process.
- ◆ The Independent Producer—Alternative Site scenario. In this case, the winner of a *CFE*-administered bid has opted to propose construction of the plant on a site different from the one identified by *CFE*. In this case, the developer is responsible for most of the initial permitting activities performed by *CFE* under the Optional Site scenario. Some permits required in the case of projects undertaken by *CFE* would not be required for the developer, since *CFE*, as a government agency, is bound by regulations that do not apply to private companies. This scenario also applies in cases of independently developed projects that are not part of a *CFE*-administered bid.

### **A.1.2. Overview of Basic Permits and Procedures for Generation Projects**

Although the focus of this *Handbook* is the environmental permitting process, it is important to understand all the activities required in the process of obtaining the permit to build and operate a new generation station or transmission line in Mexico. The basic permitting process for electric sector projects in Mexico, both generation and transmission, involves five general activities that should be undertaken more or less sequentially. The activities are as follows:

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<sup>5</sup> It is important to note that the designation “IPP” used here is not entirely consistent with the understanding of the term “independent power production” in markets outside Mexico, in that Mexican IPPs are limited to sales to *CFE* under contracts awarded through official bids.

1. Site selection, securing water rights and initiating process of obtaining Land Use Permit.
2. Environmental permitting.
3. Energy regulatory permitting.
4. Health and safety permitting.
5. Construction permits.

These activities are summarized in Figure 2 (for the Optional Site scenario) and Figure 3 (for the Alternative Site scenario) and with the corresponding descriptions.

The following annotations describe the steps represented in Figure 2 and Figure 3.

1. *Preliminary site selection, establishment of ownership, securing water availability and land-use permits.* These activities are undertaken by **CFE** in the case of the Optional Site, and by the developer in the case of the Alternative Site. In parallel, the following activities must be performed:
  - ◆ *Site selection and securing all necessary titles and rights of way to the land on which the projected will be constructed.* For generation projects, this is the land on which the generation station will be located, and through which all ducts, transmission lines and conveyances will pass to serve that generation station. In the case of transmission projects, this is the land through which the transmission line will pass.
  - ◆ *For generation projects only, identification of water resources, followed by preparation of the application for registration in the Water Rights Register, along with permits for wastewater discharge and use of any necessary coastal or other federal land.* **CFE** is responsible for preparation of the application only if **CFE** intends to keep the ownership of the project, as in the case of large hydro-generation plants. Otherwise, the Water Use Rights and Water Certificates are the responsibility of the developer. In this case, **CFE** limits its participation in the permitting process to the water availability feasibility study. This activity is closely related to the site selection process, making it necessary to initiate activities with the **CNA** early in the site selection process.
  - ◆ This phase will also include the initiation of land use permitting at the municipal level, including the filing for the Feasibility of Land Use Change (*Factibilidad de Cambio de Uso de Suelo*) as well as the subsequent filing for the Land Use Permit.

The site selection process is critical, especially in the case of sites destined to be proposed by developers as Alternative Sites in **IPP** bids. In several aspects of the permitting process it is possible for the developer to reach the conclusion that it is impossible to secure the necessary permits for a given site. Hence, it is important for the developer to prescreen sites carefully to ensure that a given site has a strong chance of obtaining the necessary permits.

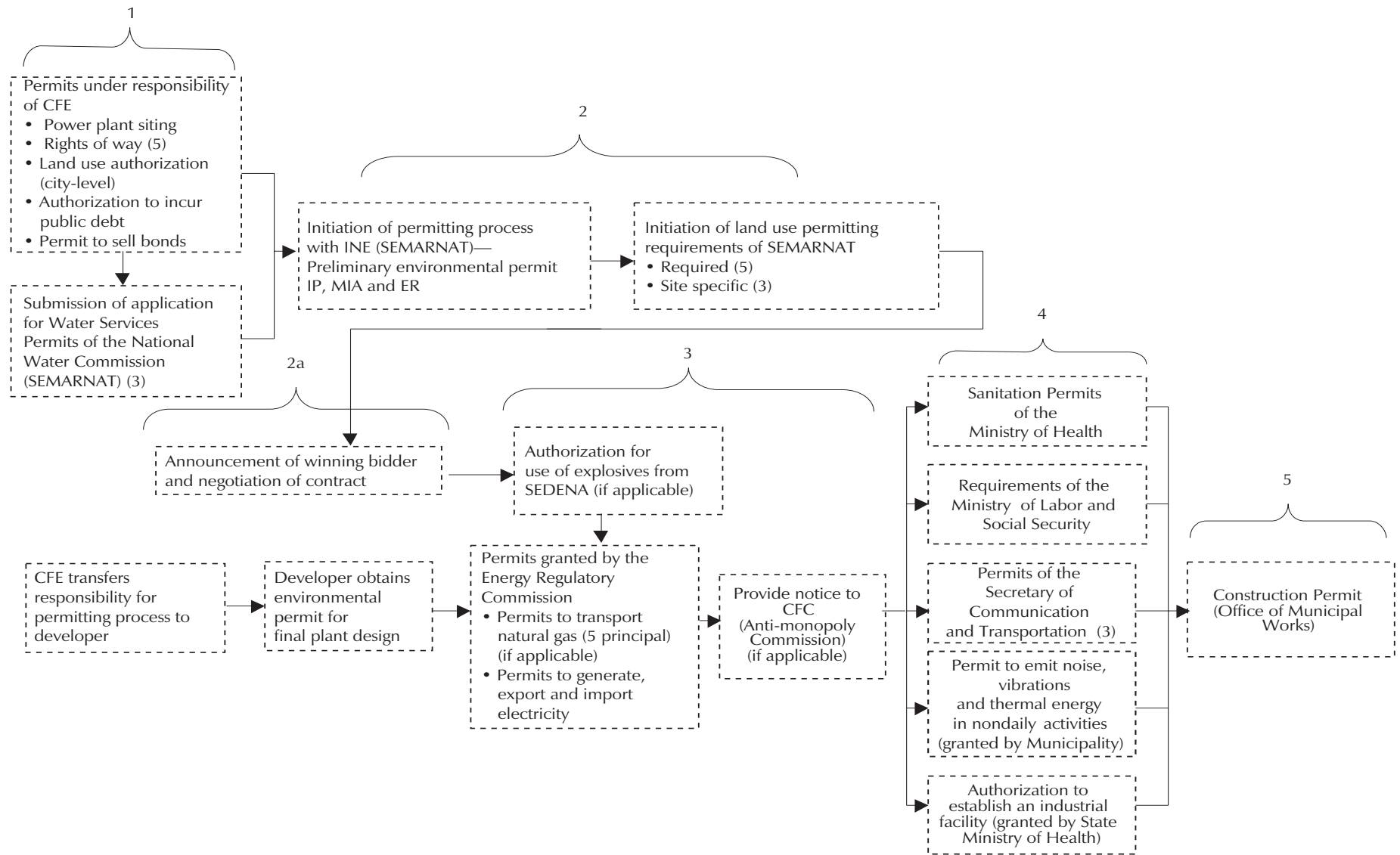
2. *Environmental permitting.* Once the land and water rights issues have been resolved, and at least an initial determination supporting the issuance of a Land Use Permit for the project has been obtained, the environmental permits are then secured. The *CFE*, or the developer, file an *IP* with *SEMARNAT*. In the case of filings made by *CFE* for projects that will be issued in international tender, the aspects of the project related to the design of the plant are necessarily preliminary, since the definitive design will not be known until after the winning bidder is selected. Based on this filing, *SEMARNAT* sends the developer an initial ruling requiring an *MIA* or exempting *CFE* or the developer from fulfilling the *MIA* requirement. Documentation of either this exemption or *SEMARNAT*'s decision (*resolución*) on the *MIA* and accompanying *ER* constitutes the principal environmental permit for a project. Under the new *MIA* regulations published on May 30, 2000, various types of electric sector projects are exempted from filing *MIAs* and are required only to present *IPs*. These projects are detailed in Part B.

In cases where the proposed project will be located or will pass through forested areas, the project developer needs to secure a land use change permit from the State Delegation of *SEMARNAT* in each state where the project is located. The project developer must also obtain a Permit for Change of Land Use in Forested Area in the case of a transmission line construction project that crosses state boundaries. At *SEMARNAT*, the permitting process occurs at the federal level, more specifically, with the Federal State Delegations. The State Delegations only consult the Central Office of the *SEMARNAT* in the case of projects that have an area larger than 10 hectares. In any case, the final decisions are made at the Federal State Delegation level.

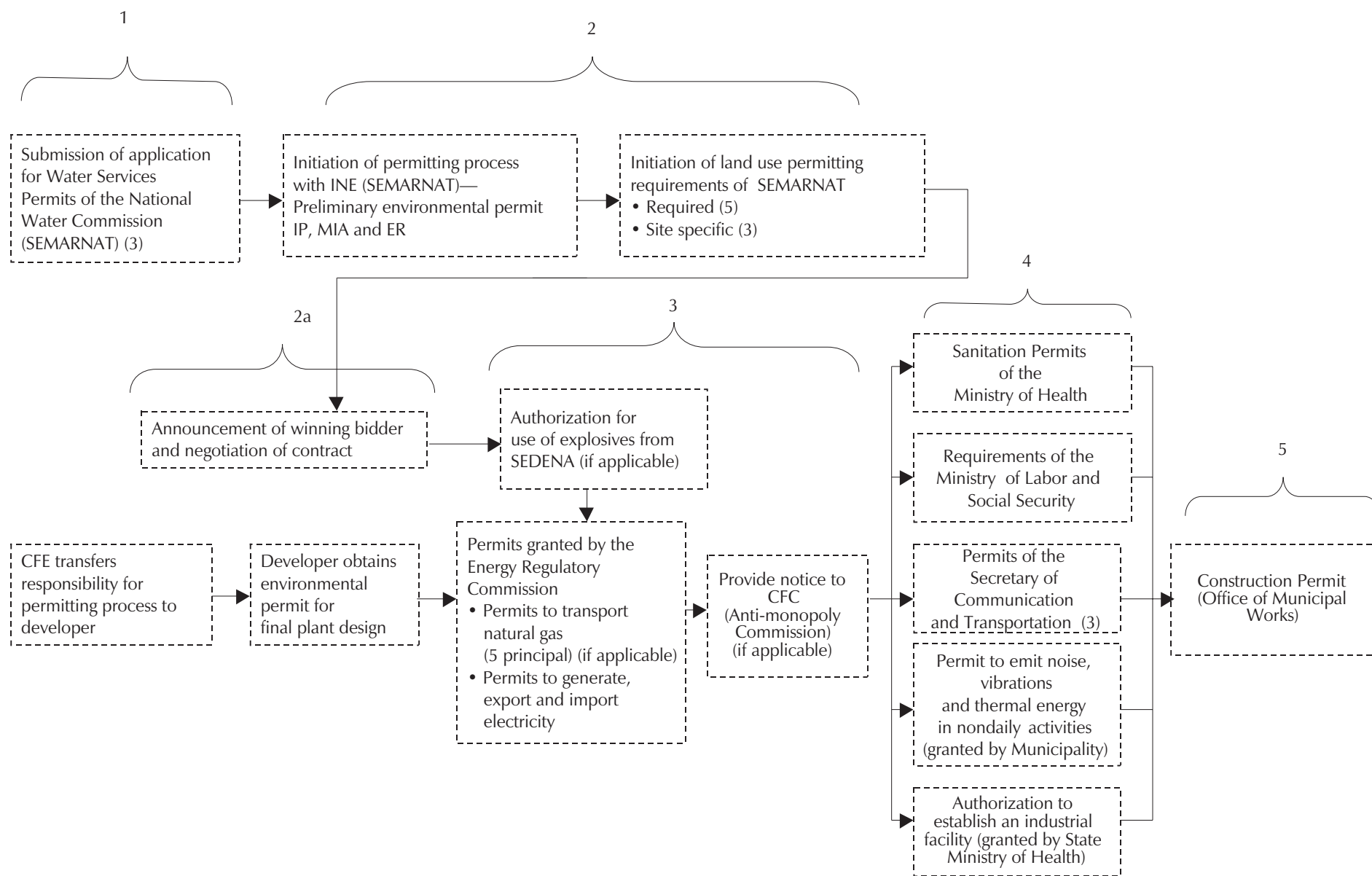
If explosives will be used during construction, it is recommended that the developer initiate the permitting process at this stage. The permission from the Secretary of National Defense (*Secretaría de la Defensa Nacional*, or *SEDENA*) to use explosives is not a prerequisite for the *SEMARNAT* process.

- 2a. *Transfer of permitting responsibility and review (applies in case of Optional Site, but not the Alternative Site).* In the case of facilities where construction and operation will be handled by a private entity under a long-term contract with *CFE* (*IPP* permit), the definitive plant design is not known until after the winning bidder is selected. Since *CFE* has already initiated the permitting process, and *SEMARNAT* has already issued a preliminary approval for the plant location and type, a review is required to ensure that the winning design does not contemplate any features that would violate the conditions under which the preliminary authorization was approved. In addition, *CFE* formalizes the transfer of responsibility for permitting to the developer with the Agreement Transferring Administrative Responsibility. This step constitutes the major difference between the Optional Site case and the Alternative Site case, as shown in Figure 2 and Figure 3.

**Figure 2: General Overview of the Permitting Process for a Generation Project, Optional Site**



**Figure 3: General Overview of Permitting Process for a Generation Project, Alternative Site**





3. *Energy regulatory permitting.* Once the environmental permits have been obtained, the developer proceeds with the permits issued by *CRE*, the most important of which is the permit to generate, import or export electricity by independent production, cogeneration, self-generation or small production. In the event that a natural gas line needs to be constructed, a series of permits and requirements for transporting gas are also needed. In some cases, the developer must file information on the project with the Federal Competition Commission (*Comisión Federal de Competencia*, or *CFC*).
4. *Health and safety permitting.* Following receipt of the appropriate *CRE* permits, the developer must obtain permits from the Secretariat of Health (*Secretaría de Salud*, or *SS*), *STPS* and the local authorities related to industrial safety and hygiene and health and related concerns, including noise.

In addition, permits will generally be required from the agency administering the country's transportation infrastructure and regulating the sector, the Secretariat of Communications and Transportation (*Secretaría de Comunicaciones y Transportes*, or *SCT*).

5. *Construction permits.* Finally, the relevant Office of Municipal and Public Works (*Dirección de Obras Públicas Municipales*, or similar name) grants the developer a construction permit based on a filing that includes all the relevant information.

Under the Independent Producer—Optional Site scenario, *CFE* is responsible for completing most of activities 1 and 2 prior to bid solicitation, with the exception of prospecting for water resources, registering water rights and securing permission to use explosives (if applicable), all of which are typically carried out by the developer. In contrast, under the Independent Producer—Alternative Site scenario, the developer must carry out activities 1 and 2 because it has elected to build a project on a site other than the one recommended by *CFE*. Activities 3 to 5 are always carried out by the winner of the bid solicitation.

It is important to note that the activities outlined above involve contacts with agencies at the municipal, state and federal levels. As a result, the permitting process requires developers to work closely with officials at agencies of all three levels, often simultaneously. This aspect of the permitting process is described in greater detail in Part B.

### ***A.1.3. Overview of Basic Environmental Permits and Procedures***

As noted in Section A., the environmental permitting process encompasses the preparation and approval of several specific documents. While the *IP* and the *MIA* make up the backbone of the process, other important components include an *ER* that accompanies the *MIA*, an Accident Prevention Program (*Programa de Prevención de Accidentes*, or *APP*) that *SEMARNAT* must authorize, or alternatively, a Contingency Program (*Plan de Atención a Contingencias*) if the *APP* is not required. Filing the *APP* or Contingency Program and obtaining approval is the responsibil-

ity of the developer. In cases where existing standards<sup>6</sup> (*Normas Oficiales Mexicanas*, or *NOMs*) are in effect and in accordance with the proposed rulemaking for *MIAs*, the *MIA* process may be substituted for the preparation of a simpler *IP*.

In addition, generation and transmission projects must ensure continued compliance with environmental regulations by obtaining the *LAU*, updated on an annual basis with the *COA*. The developer obtains the *LAU* and *COA* following its completion of the *IP*, *MIA*, *ER* and Contingency Program requirements.

Finally, there are permits that are required only when a certain situation applies, such as the permit for open-air combustion during fire control training session authorization to utilize areas under federal jurisdiction, such as maritime land zones, and authorization to change use of forest lands.

The procedures required for securing the Land Use Change permit are similar to those performed for the *MIA*, and in fact need to be linked to the submission of the *MIA*. The process involves preparation of a Technical Justification Study (*Estudio Técnico-Justificativo*, or *ETJ*) that documents the basis for selection of the site or path for the project, and demonstrates that there are no other less damaging alternatives. The *ETJ* is submitted to the Federal State Delegation of *SEMARNAT* for the state(s) where the project is to take place, and should include a copy of the *MIA* filed with *SEMARNAT* (or the Federal State Delegation of *SEMARNAT*), as well as all the relevant documentation regarding ownership of the land and rights of way.

Detailed descriptions of these documents are provided below. The descriptions are not intended to provide detailed guidance on how to prepare such filings as the *IP*, *MIA* or *ER*—more detailed information appropriate for this purpose is available in the Annex.

#### **A.1.3.1. Preventative Notice (*Informe Preventivo*, or *IP*)**

The *IP* is intended to provide a preliminary presentation of the project, its location and potential environmental impacts. The purpose of the *IP* is to provide the environmental authorities with general information on the project to determine whether an *MIA* will be required and on what basis—regional or specific (*particular*). In certain instances specified in the Regulation of the General Law of Ecological Equilibrium and Environmental Protection Regarding Environmental Impact Assessment (*Reglamento de la Ley General del Equilibrio Ecológico y la Protección al Ambiente en Materia de Evaluación del Impacto Ambiental*, or simply “Reglamento”), published May 30, 2000, projects may be exempted from filing an *MIA* and may simply file an *IP*. The exemption applies to projects for which there are *NOMs* in place that are implemented in the context of pre-approved development plans or within indus-

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<sup>6</sup> To be exempted from submitting the *MIA*, the project must fulfill the requirements of Article 31 of *LGEEPA* or Article 29 of its Regulation.



trial parks already approved by *SEMARNAT*. If a project under federal jurisdiction does not fall under the rubrics considered in Article 28 or the exceptions listed in Article 31 of *LGEEPA*, it is not required to present an *IP* or *MIA* (see Section 4 of Annex).

#### **A.1.3.2. Environmental Impact Statement (*Manifestación de Impacto Ambiental, or MIA*)**

The *MIA* is a document prepared by the project developer and reviewed by *SEMARNAT* as part of the approval process stipulated in the rulemaking on environmental impact assessment. Until June, 2001, this activity was handled by *INE*, but as a result of the restructuring of *SEMARNAT*, this function has been shifted to *DGIRA* within the Secretariat. The *MIA* should include a comprehensive review of the significant and potential environmental impacts associated with all phases of a project, from construction through operation, based on scientific and technical studies. The *MIA* should also describe the measures for avoiding and mitigating these environmental impacts. Details of the types of projects and sectors for which *MIAs* are required, and those cases where the project is exempted from filing an *MIA*, are provided in the May 30, 2000, Reglamento (see Section 4 of Annex).

#### **A.1.3.3. Risk Study (*Estudio de Riesgo, or ER*)**

The *ER* is a detailed review prepared by the project developer covering the potential risks posed by the construction of the project, and is required of all projects involving activities or substances that are designated as hazardous in *LGEEPA* (Article 30) and exceed the amounts specified in rulemakings on the subject<sup>7</sup>—considering their corrosive, reactive, explosive, toxic, inflammable or biologically infectious properties. The *ER* should include a presentation of the following issues, at minimum: (1) the probability of accidents involving explosions, fire or spills of pollutants; (2) the potential radii of impact of such accidents beyond the plant itself; (3) the severity of impact within these radii; (4) the safety measures implemented to prevent the occurrence of such accidents; and (5) the Accident Response Plan (*Plan de Atención a Contingencias, or PAC*) to be implemented in the event of such an accident.

#### **A.1.3.4. Accident Prevention Program (*Programa de Prevención de Accidentes, or APP*)**

Under Article 147 of *LGEEPA*, the *APP* is a specialized plan based on the results of the *ER* that includes organization, human and material resources, plans, procedures, and planning and preventative measures involving emergencies with pollutants to protect workers, surrounding populations, the environment and natural

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<sup>7</sup> *Diario Oficial*, March 28, 1990 and May 4, 1992.

resources. The plan must be approved by **SEMARNAT**, Secretariat of Energy (*Secretaría de Energía*, or **SENER**), Secretariat of Economy (*Secretaría de Economía*, or **SE**), **STPS** and Secretariat of the Interior (*Secretaría de Gobernación*, or **SG**).

#### **A.1.3.5. Environmental Impact Assessment (*Evaluación de Impacto Ambiental*, or *EIA*)**

The *EIA* process refers to the review of the *MIA* and the *ER* undertaken by **SEMARNAT**, which in turn establishes the prevention and mitigation measures to be required of the applicant, and concludes with the issuance of the Environmental Impact Authorization (*Autorización de Impacto Ambiental*, or *AIA*). As such, the process is not controlled by the applicant, and may lead to costly delays in the issuance of the *AIA* and the Construction Permit. This review process is based on the stipulations of *LGEEPA* (Article 3, parafigure 20) and the Reglamento of May 30, 2000.

#### **A.1.3.6. Technical Justification Study (*Estudio Técnico-Justificativo*, or *ETJ*)**

The *ETJ* addresses the impact of a project on forested areas and is required in applications for the Permit for Change of Land Use in Forested Areas. The *ETJ* is complementary to the *MIA*, which must be filed along with the *ETJ* in the application to *DGDFSFS*. Details of the information that must be included in the *ETJ* are provided in Article 53 of the Implementing Legislation for the Forestry Law (*Reglamento de la Ley Forestal*).<sup>8</sup> (See Section 11 of Annex.)

#### **A.1.3.7. Comprehensive Environmental License (*Licencia Ambiental Única*, or *LAU*) and the Annual Operations Certificate (*Cédula de Operación Anual*, or *COA*)**

The *LAU* and the *COA* are administrative procedures based on the Interagency and Intersecretarial Agreement published in the *Official Daily* on April 11, 1997, and updated with the publication of the instructions for the *LAU* on April 9, 1998. The *LAU* is the document that incorporates the evaluation, approval and monitoring of all environmental obligations of industrial facilities under federal jurisdiction—covering all procedures for environmental impact and risk, emissions to the atmosphere and the generation and handling of hazardous wastes administered by the General Office of Integrated Pollutant Management (*Dirección General de Manejo Integral de Contaminantes*, or *DGMIC*) of **SEMARNAT** (as of June 2001) as well as water services, which are under the jurisdiction of **CNA**. The *LAU* is obligatory for new and existing facilities with respect to emissions into the atmosphere, and it must be updated to reflect increases in capacity, plant expansions and ownership changes. The *COA* is an annual licensing process implemented to ensure that industrial facilities report their emissions levels to *DGMIC* as part of the inventory of environmental impacts maintained by **SEMARNAT**.

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<sup>8</sup> *Diario Oficial*, September 25, 1998.

#### **A.1.4. Public Participation (*Participación Pública*)**

The public consultation process is a requirement of the May 30, 2000, Reglamento, and obliges *SEMARNAT* to publish information about the applications for *AIA*s that it has received. Further, the *SEMARNAT* may hold a public meeting to review a specific project at the request of any member of the community potentially affected by the project. Regardless of whether this public hearing is undertaken at the behest of the *SEMARNAT* or by the project developer itself, exposure of the project to public comment may result in difficulties, especially if this is done without adequate legal and public relations support from Mexican organizations.

It is important to note that the issuance of loans or investments from international financial institutions may require that the project sponsors hold a public hearing irrespective of what *SEMARNAT* decides to do.

#### **A.1.5. Other Aspects of the Permitting Process (*not covered in detail in this Handbook*)**

Several important permitting issues mentioned in Section A. are not covered in detail in this *Handbook*. In addition to permits related to energy-sector regulations, health and safety issues and construction, there is also a series of procedures required of any new business established in Mexico. The permitting issues not covered in this *Handbook* are covered in a companion handbook, *Legal Manual for Electricity Sector Projects in Mexico*.

##### **A.1.5.1 Energy Sector Permits: *Secretaría de Energía (SENER)* and *Comisión Reguladora de Energía (CRE)***

*LSPEE* permits for self-supply, independent production, cogeneration and small-scale production are issued by the *CRE*, an agency affiliated with the *SE*. These permits are discussed in some detail in this *Handbook*. Note that the *CRE* expects project developers to have obtained all necessary environmental permits prior to filing for the relevant *CRE* permit.

##### **A.1.5.2. New Business Registrations and Permits: *Secretaría de Relaciones Exteriores, Secretaría de Hacienda y Crédito Público (SHCP)* and *Secretaría de Economía (SE)***

In the event that the generation project or transmission project involves the creation of a Mexican corporation, the developer must obtain several permits and filings required by the Secretariat of Foreign Relations (*Secretaría de Relaciones Exteriores*), *SHCP* and the *SE*. These permits and certificates are not addressed in this *Handbook*, but are described in the companion *Legal Manual for Electricity Sector Projects in Mexico*.

#### **A.1.5.3. Secretaría de la Defensa Nacional (SEDENA)**

In the event that the construction of the plant or transmission line will require the use of explosives to blast rock formations in preparation for laying foundations for the facility, the developer must obtain a permit for the use of explosives, which is issued by *SEDENA*.

#### **A.1.5.4. Secretaría de Comunicaciones y Transporte (SCT)**

A generation facility will require permits from *SCT* for various aspects of construction of a generation facility and transmission line. Permits will be required when:

- ◆ An access road, pipeline or transmission line crosses or connects to a roadway, railway or other thoroughfare under federal jurisdiction.
- ◆ Satellite or radio communications are to be established for the facility.

#### **A.1.6. Required Public Registrations and Titles**

There are a range of registrations and titles required of the developer to complete the permitting process, including the following requirements at the federal level:

- ◆ Registrations with *SE* for foreign investments and new commercial entities.
- ◆ Tax registration with *SHCP*.
- ◆ Local business registration with the Commercial Register at the state and municipal level (only some municipalities require this).

Further detail on these registrations is described in the companion guide to this *Handbook*, the *Legal Manual for Electricity Sector Projects in Mexico*.

#### **A.1.7. Exemptions from Environmental Impact Statement**

According to Article 5 of the rulemaking for *LGEEPA* (*Reglamento de la Ley General del Equilibrio Ecológico y Protección al Medio Ambiente*), published on May 30, 2000, in the case of the electric industry, developers are not required to present an *MIA* for the following projects:

- ◆ Energy generation plants with total capacity equal or less than 0.5 MW designated to residential and office consumption
- ◆ Construction of electric power or distribution stations or substations located in urban, suburban, agricultural, industrial or tourist areas
- ◆ Electric transmission and subtransmission works located in urban, suburban, agricultural, industrial or tourist areas.

## PART B. ENERGY GENERATION PROJECTS

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Part B covers in detail each of the authorities involved for obtaining the permits required for the Optional and Alternative Sites in energy generation projects. In the case of the Optional site (Part B.1), the following five authorities are involved: the Federal Electricity Commission (*Comisión Federal de Electricidad*, or *CFE*), the National Water Commission (*Comisión Nacional del Agua*, or *CNA*), the Office of Environmental Impact and Risk (*Dirección general de Impacto y Riesgo Ambiental*, or *DGIRA*) of *SEMARNAT*, State Delegations of the Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente, Recursos y Naturales*, or *SEMARNAT*) and the municipality. In the case of the Alternative Site (Part B.2), the following four authorities are involved: *CNA*, *DGIRA* of *SEMARNAT*, State Delegations of *SEMARNAT* and the municipality. In the Optional Site and in the Alternative Site, each of the authorities has a specific figure to show the different permits involved, and each figure is accompanied by annotations to give the user an explanation of each step in the figure. In addition, the time and cost requirements for each permit are provided.

According to the Law on Public Service of Electricity (*Ley del Servicio Público de Energía Eléctrica*, or *LSPEE*), private sector entities may develop, own and operate generation facilities under four different categories recognized in the law and its accompanying rulemaking, which includes *IPPs*, small-production, self-supply and cogeneration projects. *IPP* projects, also known as Independent Producer Projects (*Productores Independientes*) in Mexico, involve facilities larger than 30 MW that are bid competitively by *CFE*, which signs a long-term Power Purchase Agreement (*Contrato de Compra-Venta de Energía*, or *PPA*), under which the independent power producer sells electricity to the *CFE*. Small production projects involve facilities smaller than 30 MW with capacity and energy available for sale to *CFE*. Self-supply and cogeneration projects allow industrial and commercial facilities to generate electricity for their own use or for sale within a group of investors in the project. To undertake such a project, the developer must obtain a generation permit from the Energy Regulatory Commission (*Comisión Reguladora de Energía*, or *CRE*), an independent agency affiliated with the Secretariat of Energy (*Secretaría de Energía*, or *SENER*). At present, most permits have been issued to private entities for cogeneration and self-supply projects. However, given the increased use of long-term power purchase agreements with *IPPs* by *CFE* to expand its generation capacity, the number of independent producer permits will increase dramatically.

This section reviews the environmental and natural resources permits required for *IPP* projects under each of the two scenarios described earlier: the Independent Producer—Optional Site scenario and the Independent Producer—Alternative Site scenario. For the most part, the permits required for each type of project are the same, but there will be certain variations. The most important variation is that the international bidding process for the *IPP* projects requires *CFE* to initiate the per-

mitting process for projects at sites selected by *CFE* (Optional Sites). *CFE* does permit bidders to propose an Alternative Site, but in that case the bidder, and not *CFE*, must initiate the permitting process.

The overall permitting process will be the same for projects undertaken under other *CRE* permit categories identified in the *LSPEE*—cogeneration, small-scale generator and self-supply. There may be special permitting requirements—or exemptions—for technologies other than the natural gas-fired combined-cycle facilities that are most commonly used in Mexico at present.



## B.1. Independent Producer—Optional Site

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As part of its legally mandated system planning and development function, the *CFE* undertakes a series of permitting and project development activities to ensure that the project, as bid, can be implemented by the winning bidder. Because the environmental authorities have limited resources and duplicate permitting by bidders would be a waste of bidder resources, *CFE* initiates the environmental permitting process prior to the completion of the bidding process, on the condition that the winner takes responsibility for all environmental permitting issues as part of the process of taking control of the project.

This section reviews the entire process as outlined in Figure 2. Specifically, the process involves the following:

- ◆ *CFE*-initiated permits (Section B.1.1.)
- ◆ *CNA* permits (Section B.1.2.)
- ◆ *DGIRA* of *SEMARNAT* permits (Section B.1.3.)
- ◆ State Delegations of *SEMARNAT* permits (Section B.1.4.)
- ◆ Construction permits, or local permits (Sections B.1.5.).

### B.1.1. *CFE-Initiated Permitting Activities*

Figure 2 provides an overview of permitting activities required for the development of a generation project and which are initiated by *CFE* in the case of *IPP* projects. The presentation in Figure 4: *CFE* Permitting Activities, Optional Site is based on the general elements presented in Figure 2, with the following additions:

- ◆ Interaction with authorities at federal, state and municipal levels is considered.
- ◆ Permits required of *CFE* by virtue of its status as a subdivision of the federal government, and would not be required of private developers under any circumstances (authorization to contract debt, permit to issue bonds) are noted.
- ◆ Permits and activities are grouped according to whether they are initiated by *CFE* or undertaken by the developer, and where the transfer of activities from *CFE* to the developer occurs in the overall process.

The length of time required for these activities is more difficult to determine, as they are internal to *CFE* and the federal government. However, delays in completing these activities are unlikely to affect developers bidding on *IPP* plants since these *CFE*-initiated activities must be completed before the public bid can proceed.

## Annotations to CFE-Initiated Permitting Activities

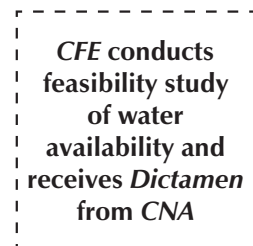
The following annotations describe each of the steps identified in Figure 4. This section is generally organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response. (See the Acronyms and Terminology section for the administrative terms used in Spanish and the translations into English used in this *Handbook*.) In some instances, for example when separate processes must be implemented in parallel, the annotations presented here do not follow the Critical Path Diagram strictly from top to bottom and from left to right.

It is important to note that in the Optional Site case, the *CFE* initiates a variety of administrative procedures while preparing the bid documents. *CFE* then oversees the bid process, selects a winner and transfers to the winning bidder the responsibility of completing the procedures already underway, and beginning those not yet initiated.



### Administrative Procedure:

Complete power plant site selection studies. These are undertaken by *CFE*, and generally begin with several different sites that are then narrowed down to one location based on criteria such as access to the transmission grid, access to water and ability to obtain the necessary rights of way.



### Administrative Procedure:

*CFE* obtains a confirmation of water availability (*Dictamen de Factibilidad*) from *CNA*.

Given the vital importance of water for all thermal generation configurations, securing access to water is the first step to permitting the plant. Accordingly, *CFE*'s initial actions in establishing the location of a plant and the viability of its construction will be to investigate the water availability for the project. If water is available at the site as surface water, groundwater or even residual water from the municipalities, the *CNA* will grant a confirmation of water availability to *CFE*.



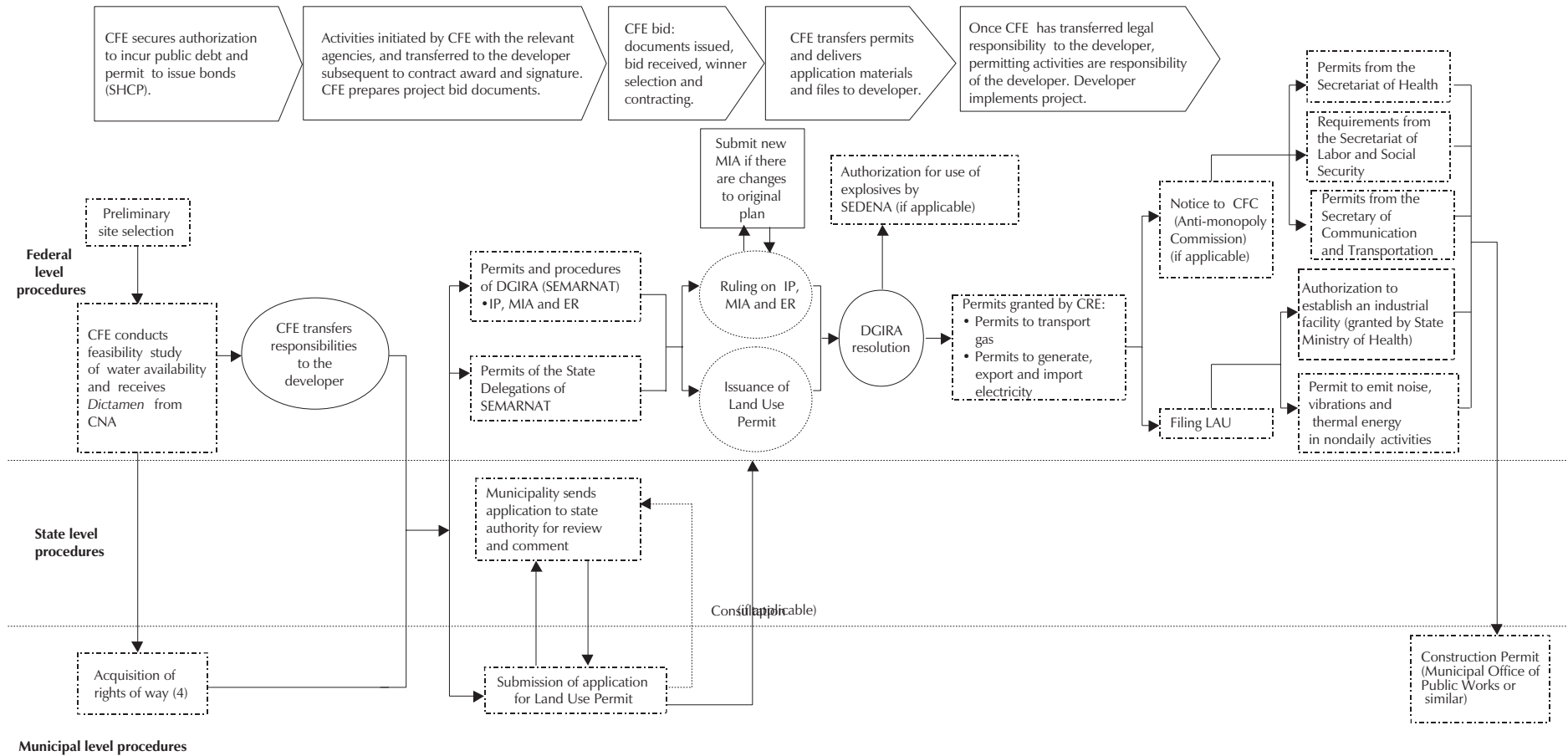
### Administrative Response:

*CFE* transfers responsibilities to the developer.

Once a winner has been selected, and the requisite agreements covering the *PPA* and other aspects of the *IPP* project have been completed,



Figure 4: CFE Permitting Activities, Optional Site Annotations to CFE-Initiated Permitting Activities



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the *CFE* then proceeds to transfer administrative responsibility to the winner. This is completed with execution of an agreement—referred to as the Agreement Transferring Administrative Responsibility—between *CFE* and the winning bidder. Once that agreement is in place, the developer proceeds with completion of the *MIA* review process, as well as all other required permits.

As will be described in greater detail in Sections B.1.2. and B.2.1., this involves obtaining the rights for use of waters under federal jurisdiction (or an agreement to take treated water provided by the municipal or state government), and a wastewater discharge permit (since water will be discharged into a body of water). In the event that water cannot be secured, selection of an alternate location will certainly be recommended.

#### Administrative Procedure:

Acquisition of rights of way.

*CFE* undertakes negotiations with the current landowners (whether private, communal [*ejidos*] or public) for terrain that will be required for the implementation of the project. Clearly the area required for rights of way is likely to be largest for the gas and electric transmission lines serving the project, and in the event that these rights are not available to *CFE*, an alternative project site might be selected. The required right-of-way activities include:

1. Right of way for transmission lines
2. Right of way for the spur line of the natural gas line in Mexico (if applicable)
3. Right of way for the water pipeline
4. Right of way for access road(s) (if applicable)

#### Administrative Procedure:

*CFE* presents the Preventative Notice (*Informe Preventivo*, or *IP*) to the officials at *DGIRA* of *SEMARNAT*, as required by the regulations governing environmental impact issues. *CFE*'s pre-

Acquisition  
of R/W (4)

Permits and  
procedures of  
*DGIRA* of  
*SEMARNAT* (*IP*,  
*MIA*, *ER*)

sentation is based on a prototypical project design. *DGIRA* may also require a Risk Study (*Estudio de Riesgo*, or *ER*).

Obtain authorization from *SEMARNAT* to proceed, either on the basis that the *IP* is acceptable and the project is exempted from preparing an Environmental Impact Statement (*Manifiesto de Impacto Ambiental*, or *MIA*) or that the *MIA* will be required. The initial response of *SEMARNAT* to the *IP* presentation is decisive in the selection of the site and enables *CFE* to proceed with the *IPP* project tender, since a negative response from *SEMARNAT* at this point will force *CFE* to reconsider the proposed location of the plant. Once *DGIRA* has indicated its acceptance of the *IP* presented by *CFE*, and it instructs *CFE* that the *MIA* and *ER* are required, *CFE* prepares a preliminary *MIA* and *ER* based on a prototype design for the plant—this is necessary since the actual design used will not be established until *CFE* selects the winning bidder in the competition for the *IPP* contract.

Permits of State  
Delegations of  
*SEMARNAT*

#### Administrative Procedure:

In the event that the project will cross forested land, a Permit for Change of Land Use in Forested Area will be required.

The application for the Permit for Change of Land Use in Forested Area must contain the following:

- ◆ Name and address.
- ◆ Original and copy of the ownership title or original of the document that permits the holder to apply for the permit. In the case of *ejidos* and communities, it is necessary to obtain a copy of the assembly act registered at the National Agrarian Register, which contains the agreement to make the change in forested land use.

Submission of  
application for  
Land Use Permit

Ruling on *IP*,  
*MIA*, *ER*

Submit new *MIA*  
if there are  
changes to  
original project

Issuance of  
Land Use  
Permit

- ◆ Technical Justification Study (*Estudio Técnico-Justificativo*, or *ETJ*).
- ◆ *MIA* or preliminary ruling.

#### Administrative Procedure:

File for a land-use feasibility judgment. Before filing for a Land Use Permit, most municipal and state administrations require a ruling on the feasibility of changing the land use to that of an electric generation facility. This ruling is the preliminary requirement for the actual Land Use Permit, and is important supplementary information for the *MIA* review process at *SEMARNAT*. *CFE* obtains both the approval of the Land Use Feasibility Judgment and the actual Land Use Permit.

#### Administrative Response:

Obtain *MIA* decision for proposed project location on the basis of a generic design. Once *CFE* has obtained a favorable ruling on its *MIA*, it proceeds with issuing an international tender for the construction and operation of the *IPP* plant, which includes a long-term *PPA* to sell power to *CFE*, administering the bid and selecting the winning bidder.

#### Administrative Procedure:

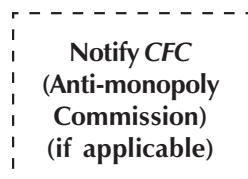
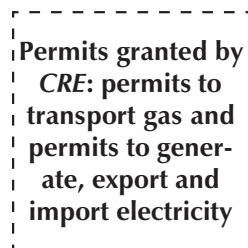
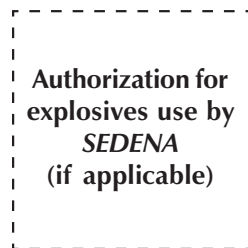
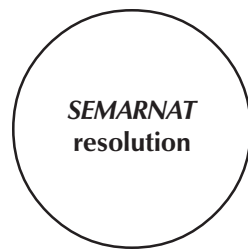
Submit new *MIA* if there are changes to the original project.

If major changes are made to the original project, a new *MIA* will be required. The developer must then re-initiate the permitting process.

#### Administrative Response:

Issuance of Land Use Permit.

The Land Use Permit is given by the municipality authorities based on the nature of the project. *This permit is very important. Even if the developer has obtained the environmental permits at federal level, if the Land Use Permit is denied, the project cannot proceed.*



### Administrative Response:

The developer submits detailed information on the project design based on the *MIA* format for review by *SEMARNAT*. *SEMARNAT* will determine whether or not the project design is consistent with the design submitted by *CFE* in its *IP* and preliminary *MIA*, and issues a definitive ruling on the *MIA*. This will permit the developer to proceed with the filings for the Comprehensive Environmental License (*Licencia Ambiental Única*, or *LAU*) and the Environmental Operation Certificate (*Cédula de Operación Anual*, or *COA*), which are described in Sections B.1.3. and B.2.2.

In this ruling, *SEMARNAT* may specify actions and measures that the developer must implement to comply with the *MIA* and obtain the *LAU*.

### Administrative Procedure:

Obtain authorization to use explosives from the Secretariat of National Defense (*Secretaría de la Defensa Nacional*, or *SEDENA*) (if applicable).

This authorization applies only if the use of explosives is necessary to facilitate the construction of the plant or the gas transportation system. However, it is not a prerequisite from *CRE* to initiating the permitting process.

### Administrative Procedure:

Once the environmental and land-use permits have been obtained, it is necessary to submit an application to the *CRE* to obtain the permits to transport gas and to generate, export or import electricity.

### Administrative Procedure:

At this stage, it is important to notify the Federal Competition Commission (*Comisión Federal de Competencia*, or *CFC*) of the project to ensure that the project complies with the current national laws.

Filing for  
*LAU*

**Administrative Procedure:**

File with the General Office of Integrated Pollutant Management (*Dirección General para el Manejo Integral de Contaminantes*, or **DGMIC**) for the *LAU*. The *LAU* represents several permits in one single document. The permits included in the *LAU* are:

- ◆ Environmental Impact
- ◆ Environmental Risk
- ◆ Air Emissions
- ◆ Hydraulic Work Services.

Permits from the  
Secretariat of  
Health

**Administrative Procedure:**

The developer must ensure that the project complies with the federal, state and municipal requirements of the Secretariat of Health (*Secretaría de Salud*, or **SS**).

Requirements of  
the Secretariat of  
Labor and Social  
Security

**Administrative Procedure:**

The developer must ensure that the project complies with the federal, state and municipal requirements of the Secretariat of Labor and Social Security (*Secretaría de Trabajo y Previsión Social*, or **STPS**).

Permits from the  
Secretariat of  
Communication and  
Transportation

**Administrative Procedure:**

The developer must ensure that the project complies with the federal, state and municipal requirements of the Secretariat of Communication and Transportation (*Secretaría de Hacienda y Crédito Público*, or **SHCP**).

Authorization to  
establish an  
industrial facility  
granted by State  
Secretariat of  
Health

**Administrative Procedure:**

The developer must ensure that the project complies with the federal, state and municipal requirements of the State Secretariat of Health (*Secretaría Estatal de Salud*, or **SES**) for implementing an industrial facility in the state.



Permit to emit noise, vibrations and thermal energy in nondaily activities
Construction Permit (Municipal Office of Public Works, or similar)

**Administrative Procedure:**

The developer must ensure that the project complies with the federal, state and municipal requirements regarding emission of noise and thermal energy in nondaily activities.

**Administrative Procedure:**

Apply for the Construction Permit. The Construction Permit is given at the municipal level and it is critical to starting the project. If the project does not have the support of the local authorities, its implementation can be jeopardized.

### ***B.1.2. CNA Permitting Requirements***

*CNA* is the agency within *SEMARNAT* that regulates all issues related to water resources under federal jurisdiction. All water sources other than municipal water supplies and water in treatment systems are under the jurisdiction of *CNA*. Water sources within the municipal water supply, treatment and discharge networks are considered to be under the jurisdiction of the local municipality. The legal basis for the requirements of *CNA* is the National Waters Law (*Ley de Aguas Nacionales*), which stipulates that the exploitation, use and development of any hydrological resource must be sanctioned by *CNA* through the issuance of water use rights: title of concession (*título de concesión*) for government or title of assignment (*título de asignación*) for particular.

Because water is an important requirement for most electricity generation technologies and vital to the operation of any facility, at the very least for human consumption needs, it is the first consideration in obtaining permits for a generation facility. These permits are:<sup>9</sup>

- ◆ Permit to discharge residual water (CNA-01-001)
- ◆ Certificate of water quality (CNA-01-002)
- ◆ New concession or assignment for surface water use (CNA-01-003)
- ◆ New concession or assignment for groundwater use (CNA-01-004)
- ◆ Concession for material extraction (CNA-01-005)
- ◆ Concession for federal land occupation for lands managed by *CNA* (CNA-01-006)
- ◆ Regularization of concession or assignment for groundwater use (CNA-01-007)

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<sup>9</sup> A list of all the environmental permits was published in the *Diario Oficial* on February 21, 2000.

- ◆ Regularization of concession or assignment for surface water use (CNA-01-008)
- ◆ Modification of concession or assignment for groundwater use (CNA-01-009)
- ◆ Modification of concession or assignment for surface water use (CNA-01-010)
- ◆ Certificate of brackish water use (CNA-01-011)
- ◆ Modification of permit for residual water discharge (CNA-01-012)
- ◆ Authorization for the transmission of titles and their registration (CNA-01-013)
- ◆ Notice of suspension of wastewater treatment system's operation (CNA-01-017)
- ◆ Request of authorization to include modifications to the hydrologic cycle (CNA-02-001)
- ◆ Permit to conduct infrastructure hydraulic work (CNA-02-002)
- ◆ Concession for the operation, conservation and management of the irrigation system and its federal hydraulic infrastructure (CNA-03-001)

For national waters under the jurisdiction of *CNA*, the main application document is called the Water Services Application. This application is actually a compendium of several certificates, permits, concessions and assignments that the developer must secure for the right to extract, use and discharge water. The Water Services Application with *CNA* must be initiated prior to conducting environmental impact studies, and concurrently with the bidding process of *CFE* if the project is for an *IPP*. In the case of Optional Sites, *CFE* conducts the Water Feasibility Study and the developer is required to initiate the Water Services Application. Further, the Water Services Application (from *CNA*) and the environmental permits (from *DGIRA* of *SEMARNAT*) are prerequisites for obtaining the *LAU* (from *DGMIC* of *SEMARNAT*), which is required for all industrial sites under federal jurisdiction, as is the case for electricity generation facilities and transmission lines. It is important to note for clarity that only the steps required by *CNA* will be mentioned. The environmental permits issued by *DGIRA* of *SEMARNAT* are presented in more detail in Figure 6 and the accompanying text. The fees are established the last week of December in the Law of Federal Fees (*Ley Federal de Derechos*) and are published in the *Diario Oficial de la Federación*. All fees are updated each semester according to inflation. The fees that appear in this document are for July–December 2001.

According to *CNA*, the time required for the permitting process cannot exceed 60 (sixty) working days for each application. Furthermore, more than one permit may be requested in one single application, a measure that could reduce significantly the time required to obtain *CNA* permits.

**Table 1: Fees Required by the CNA Permitting Process**

Permits	Fees Required (Pesos)
Permit to discharge residual water	2,688.76
Certificate of water quality	2,599.25
New concession or assignment for surface water use	1,963.21
New concession or assignment for groundwater use	2,540.67
Concession for material extraction	831.69
Concession for federal land occupation, for lands managed by CNA	2,540.68
Regularization of concession or assignment for groundwater use	1,003.95
Regularization of concession or assignment for surface water use	1,003.95
Modification of concession or assignment for groundwater use	1,003.95
Modification of concession or assignment for surface water use	1,003.95
Certificate of brackish water use	2,599.25
Modification of permit for residual water discharge	1,003.95
Authorization for the transmission of titles and their registration	1,003.95
Request of authorization to include modifications to the hydrologic cycle	1,003.95
Permit to conduct infrastructure hydraulic work	2,540.68
Concession for the operation, conservation, and management of the irrigation system, and its federal hydraulic infrastructure	2,673.67

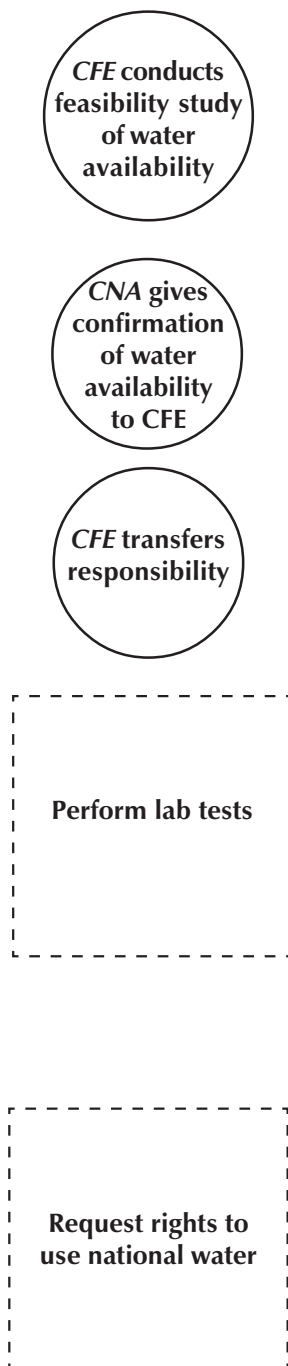
*Source: Anexo de Actualización de la Ley Federal de Derechos en Materia de Agua 2001. Fees valid for July–December 2001. Please contact CNA for updated values. Exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$*

### Annotations for the CNA Permitting Process

Although water is an indispensable requirement for generation facilities that *CFE* is contracting using the *IPP* generation permit, in the Optional Site case the water permitting requirements will also be completed by the developer. *CFE* will, however, conduct a feasibility study of water availability. *CFE* will transfer the confirmation of water availability (*Dictamen de Factibilidad*) to the developer, and the latter must initiate the permitting process with *CNA*. At the point where *CFE* is ready to transfer administrative responsibility for permitting to the winning bidder, all the permits are assumed to have been obtained by *CFE*, with the exception that the

permit-holder of record must be changed to reflect the fact that the winner, and not *CFE*, will be the actual beneficiary of the permit.

Figure 5 describes the entire process that *CFE* and the developer would have to complete to obtain a Concession for Use of Federal Waters for an Optional Site. A detailed description of the steps required for the Alternative Site is provided in Section B.2.1.



#### **Administrative Response:**

*CFE* conducts feasibility study of water availability.

If there is water at the selected site, and if it is available to be explored, *CNA* will grant a confirmation of water availability to *CFE*.

#### **Administrative Response:**

*CNA* grants confirmation of water availability to *CFE*.

#### **Administrative Response:**

*CFE* transfers administrative responsibility for the environmental permits to the developer.

#### **Administrative Procedure:**

Perform laboratory tests to identify the water quality.

It is important to mention that the water tests should be performed by an institution accepted by the National Accreditation System of Test Laboratories from Secretariat of Economy (*Secretaría de Economía*, or *SE*) and approved by *CNA*. This guarantees compliance with the water specifications required by the Federal Water Law.

#### **Administrative Procedure:**

Request rights (assignment) to use national waters or Concession of National Waters, considering if the water origin is from the surface or underground. The surface water may be obtained from a river, lake, lagoon, dam, canal or stream.

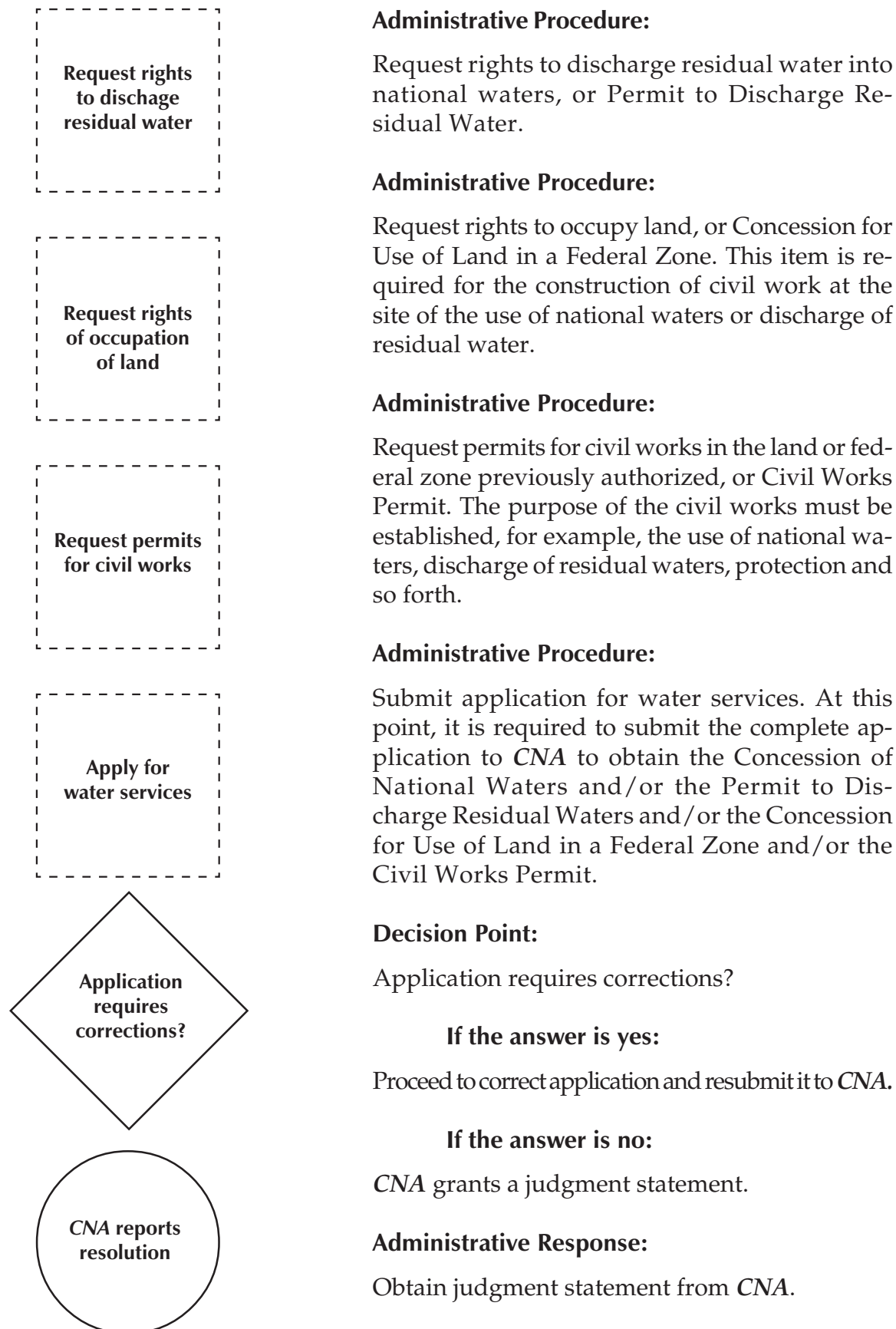
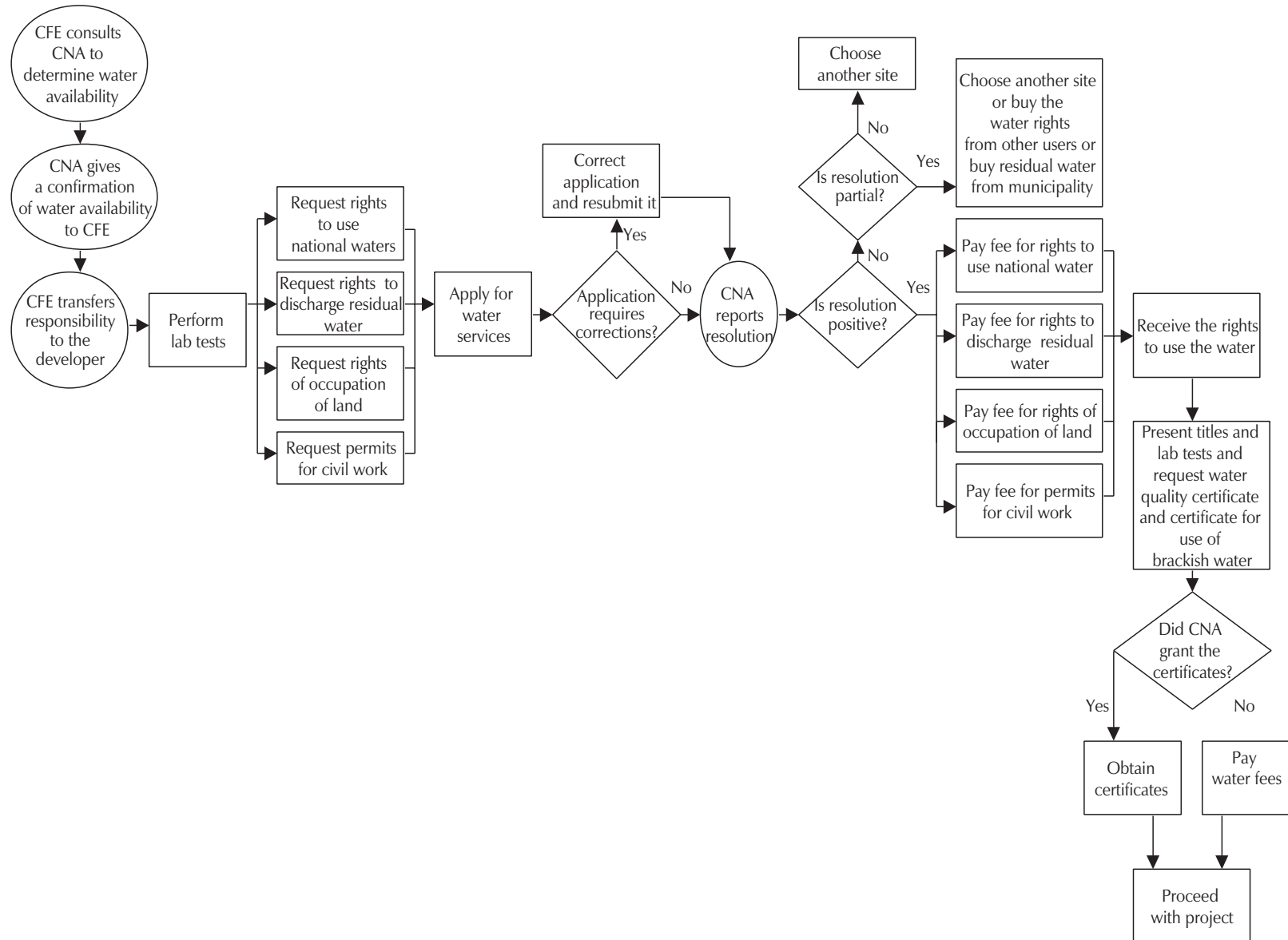
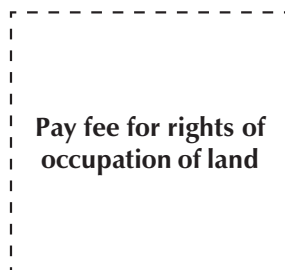
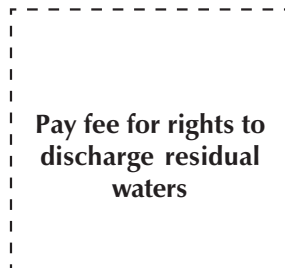
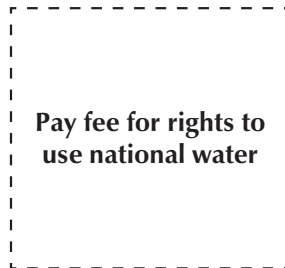


Figure 5: Critical Path for CNA Permits, Optional Site



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The resolution from *CNA* can be:

1. Positive
2. Partial
3. Negative

**Decision Point:**

Is resolution positive?

**If the answer is yes:**

Proceed to pay fees and obtain the water rights.

**If the answer is no:**

Is resolution partial?

**Administrative Procedure:**

Pay fee and receive receipt for Concession of National Waters.

**Fee:**

\$1,963.21 Pesos (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$)

**Administrative Procedure:**

Pay fee and receive receipt for Permit to Discharge Residual Waters.

**Fee:**

\$2,688.76 Pesos for each discharge stream (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

**Administrative Procedure:**

Pay fee and receive receipt for Concession for Use of Land in a Federal Zone.

**Fee:**

\$832.17 Pesos (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

Pay fee for permits  
for civil works

**Administrative Procedure:**

Pay fee and receive receipt for Civil Works Permit.

**Fee:**

\$2,540.68 Pesos (exchange rate as of 07/11/2001:  
9.40\$Pesos/1US\$).

Receive the rights to  
use the water

**Administrative Procedure:**

Receive water rights titles from CNA.

Present titles and lab  
tests and request  
certificates of water  
quality and use of  
brackish water

**Administrative Procedure:**

Present titles of water rights and laboratory tests  
and request certificates of water quality and use  
of brackish water.

Results of the laboratory tests must be submitted  
at this stage. If the certificates are not granted,  
the fees will depend on the quality and volume  
of the water discharged. The developer must pay  
the fees and proceed with the project. Users from  
communities with less than 2,500 habitants or  
with discharged water volume of less than  
300m<sup>3</sup> per day are exempted from presenting  
laboratory tests.

Did CNA grant the  
certificates?

**Decision Point:**

Did CNA grant the certificate?

**If the answer is yes:**

Obtain certificates. In this case, the developer is ex-  
empted from paying any fees for water discharge.

**If the answer is no:**

The developer must pay for fees that will de-  
pend on water quality and volume of water to  
be discharged.

Obtain  
certificates

**Administrative Procedure:**

Obtain Water Quality Certificate. This certificate  
has duration of 1 year and exempts user from

paying for the water if it is demonstrated that the wastewater meets the established quality standards.

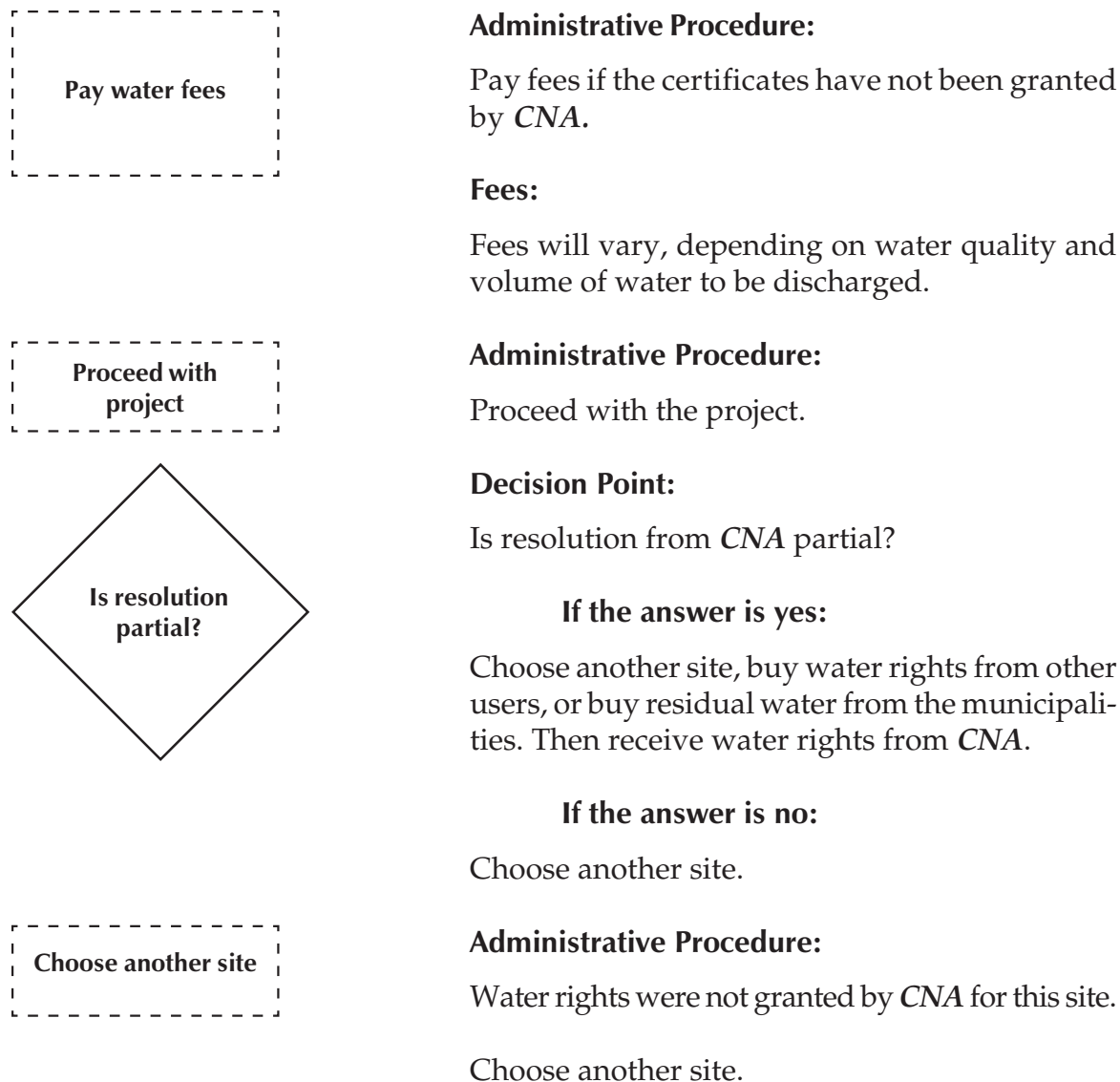
Obtain Certificate for Use of Brackish Water. See Sections 2 and 3 of the Annex for the application form. This certificate has duration of 3 years and it is given if the laboratory tests show that brackish water quality meets the criteria for concentration of salts present in the water. In this case the user of the brackish water is exempted from paying a water-use tariff.

The regulations developed by *CNA* (with input from *SEMARNAT*) are enforced by *CNA* when they involve municipal and private discharges into bodies of water under federal jurisdiction (effectively, most bodies of water in Mexico). The standards governing industrial and municipal discharges into federal waters (*NOM 001 ECOL 1996*, enforced by *CNA*) establish a baseline in accordance with which discharge fees are established. These standards have tended to be fairly strict for discharges into rivers and lakes (artificial or natural) when the receiving body of water is considered vital for the preservation of fauna and aquatic life, and slightly more lenient when the effluent is to be used for agricultural irrigation or municipal use for purposes that do not require potable water. However, specific industries have their own standards that apply regardless of the industry's location.<sup>10</sup>

*CNA* does not have jurisdiction over industrial discharges into municipal sewer systems (accounting for 40 percent of all industrial effluents), which are regulated by *NOM 002 ECOL 1996* and enforced by the municipality. However, since municipalities are responsible for the quality of the wastewater they discharge into federal waters, they have an incentive to ensure that companies pretreat their effluent.

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<sup>10</sup> International Trade Administration, Mexico Environmental Market Plan: Water Pollution Control (1999): 2–3.



### B.1.3. DGIRA of SEMARNAT Permitting Requirements

The legal basis for these requirements is the General Law on Ecological Equilibrium and Environmental Protection (*Ley General de Equilibrio Ecológico y Protección al Ambiente*, or *LGEEPA*) and the most recent rulemaking on environmental impact issues, the Regulation on Environmental Impact (*Reglamento del Impacto Ambiental*, or *RIA*) of May 30, 2000. This rulemaking addresses a broad range of environmental issues concerning Mexico, including protection of natural areas, rational exploitation of natural resources and measures for controlling atmospheric, soil and water contamination.

There are two main environmental permits that *CFE* must obtain before it can ensure that the developer will be able to secure the operating permits and Construction Permit needed to begin work. Since *CFE* establishes the site for the projects for

which it solicits bids, it will have to secure authorization from the environmental authorities for a plant at the site. Because the definitive project design cannot be known until after the bid, *CFE* can only secure authorization on the condition that the winning bidder (the developer) will obtain a definitive authorization by *SEMARNAT*.

*CFE* begins this process with the presentation of an *IP*<sup>11</sup>, and then, if required, an *MIA* and *ER*. The *MIA* (or *ER* if the project is exempted from the *MIA*) is required before a second major permit, the *LAU*, also granted at the federal level by *SEMARNAT*, may be obtained.

*CFE* ends its involvement in the permitting process after the winner is selected by executing an Agreement Transferring Administrative Responsibility for the permitting process to the developer. It is at this point that the developer's involvement in the permitting process commences.

The first phase of the developer's involvement in the process is to secure authorization of the *MIA* and *ER* initially submitted by *CFE*. The developer must submit a revised *MIA* and *ER* only if major changes were made to the original project. Once the developer has completed this phase, it can proceed to obtaining the *LAU* with *DGMIC* of *SEMARNAT*.

The *LAU* is granted at the federal level after the following two prerequisites have been completed: the Water Use Permit (from *CNA*) and approval of the *MIA* (from *DGIRA* of *SEMARNAT*)—which implies presentation and approval of the *IP*<sup>12</sup> and *ER*, if required. It is important to note that for the purposes of ensuring clarity in this section, only the steps required by *SEMARNAT* will be mentioned. The Construction Permit, which is issued at the municipal level, is analyzed in more detail in Figure 8.

The *LAU* is required for all industrial sites, including those considered to be under federal jurisdiction, as is the case with the generation of electricity. One of the main factors that may delay issuance of the permits may be the presence of public opposition (the procedure for answering public comments may take up to 65 additional working days beyond the normal average time period). The fees for the permits are established the last week of December by the Law of Federal Fees (*Ley Federal de Derechos*) and appear in the *Diario Oficial de la Federación*. All fees are updated each semester according to inflation. The fees that appear in this document are for July–December 2001.

The Construction Permit, which is the last permit required before construction may begin, is granted by the municipality to the developer after the following addi-

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<sup>11</sup> If the project will not cause any environmental impact or risk, an *IP* will be requested. Otherwise, an *MIA* and *ER* will be required.

<sup>12</sup> Not applicable to power plants of installed capacity higher than 0.5 MW.

tional prerequisites have been fulfilled: the Land Use Feasibility Study, Land Use Permit, approval of the *MIA*, and in case of forest lands, the Permit for Change of Land Use in Forested Lands.

The *COA* is the annual certificate required for all industrial sites, and is renewed each year. It constitutes the extension of the *LAU* after the first year of operation covered by the first filing for the *LAU*. The time required for obtaining the *COA* is not considered here.

As noted in Section B.1.1, *CFE* is responsible for initiating the process of obtaining approval of the *MIA* and the *ER*. However, responsibility for completing the process lies with the developer that wins the *IPP* bid. Hence, the process outlined in Figure 6 begins with the completion of the agreement transferring administrative responsibility for the permitting process to the developer (winner of the *CFE* bid).

**Table 2: Fees and Time Required by the *DGIRA* of *SEMARNAT* Permitting Process**

Average time period	245 Working days (roughly 1 calendar year)
Total fees required	22,986 Pesos

*Fees valid for July–December 2001. Please contact the SEMARNAT for updated values. Exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$.*

### Annotations for the *DGIRA* of *SEMARNAT* Permitting Process

The following annotations describe each of the steps identified in Figure 6. The annotations are organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response.



#### Administrative Response:

*DGIRA* of *SEMARNAT* presents its final resolution to *CFE*.



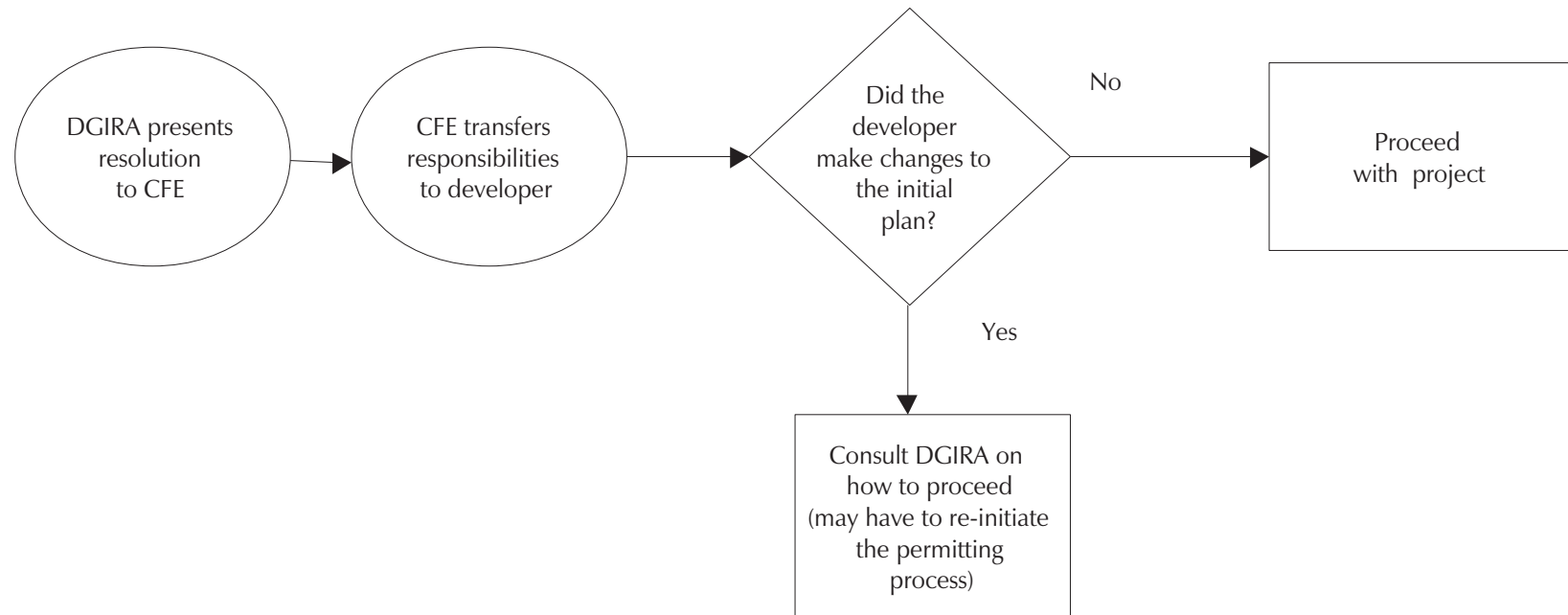
#### Administrative Response:

*CFE* transfers responsibilities of the project to the developer.

From the perspective of the developer, the process begins with the completion of the Administrative Transfer Agreement, in which *CFE* formally ends its involvement in the permitting process and transfers all documentation to the winning bidder.

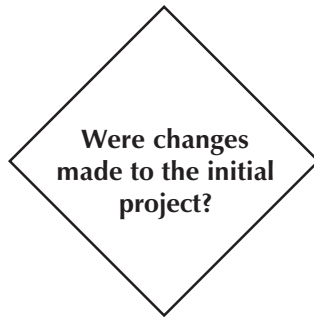
**Figure 6: Critical Path for the *DGIRA* of *SEMARNAT*, Optional Site**

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**Decision Point:**

Did the developer make changes to the initial project that has been approved by *DGIRA*?

**If the answer is yes:**

Consult *DGIRA* on how to proceed. If major changes were made, the developer must re-initiate the permitting process with *DGIRA* of *SEMARNAT*. In this case, the developer will start a new application, following the Alternative Site case (see Section B.2.2).

**If the answer is no:**

Proceed with project.

Consult *DGIRA* of *SEMARNAT* on how to proceed (may have to re-initiate the permitting process)

**Administrative Procedure:**

If changes were made to the previously approved original project, the developer must consult *DGIRA* of *SEMARNAT* on how to proceed with the permitting process. The developer may initiate the process, following the Alternative Site case, if major changes were made to the project.

Proceed with project

**Administrative Procedure:**

If the developer did not make changes to the project, the project may proceed without further consultation with *DGIRA* of *SEMARNAT*.

**B.1.4. Change in Land Use in Forested Lands Permitting Requirements from the State Delegation of SEMARNAT**

It is important to note that the Permit for Change of Land Use in Forested Area is authorized only in those cases where the relevant technical and environmental studies demonstrate that the proposed project will not adversely impact biodiversity and that soil erosion, water quality deterioration or water resource depletion impacts are nonexistent or mitigated by the project developer. The permit is issued by the State Delegation of *SEMARNAT*. The Central Office of *SEMARNAT* is consulted for technical advisory only for projects that have site areas larger than 10 hectares. The legal basis for this requirement is the Forest Law (*Ley Forestal*) of May 20, 1997 and the Forest Regulation (*Reglamento Forestal*) of September 25, 1998. It is unlikely that a generation project by itself will require this permit, but in instances where a plant is to be connected to the national grid in Mexico by a new transmission line that must pass through a forested area, the permit may be necessary.

However, in the case of the Optional Site, this procedure is completed before the *CFE* transfers administrative responsibility to the winning bidder, so it is unlikely that the issue of permitting would arise. The developer would, however, need to have the permit for the project and ensure that no subsequent action violates its terms and provisions.

**Table 3: Fees and Time Required by the State Delegation of SEMARNAT Permitting Process**

Average time period	50 Working days
Total fees required	768 –5,123 Pesos
(depending on the area of forested land to be affected, and based on the <i>Ley Federal de Derechos</i> )	

*Fees valid for July–December 2001. Please contact the State Delegations of SEMARNAT for updated values. Exchange rate as of 07/11/2000: 9.40\$Pesos/1US\$.*

### Annotations for the Federal State Delegations of SEMARNAT Permitting Process

The following annotations describe each of the steps identified in Figure 7. This section is organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for the key Decision Points, Administrative Procedures or Administrative Responses. Since the involvement of the developer is limited to receiving the permit when the Administrative Transfer Agreement is completed, the description presented in this section describes the procedures conducted by the *CFE*. Our intention is to provide the developer with a full picture of this permitting process. A more detailed description of the developer's responsibilities appears in Section B.2.3.

Conduct  
transmission line  
studies



#### Administrative Procedure:

Conduct transmission line studies.

#### Decision Point:

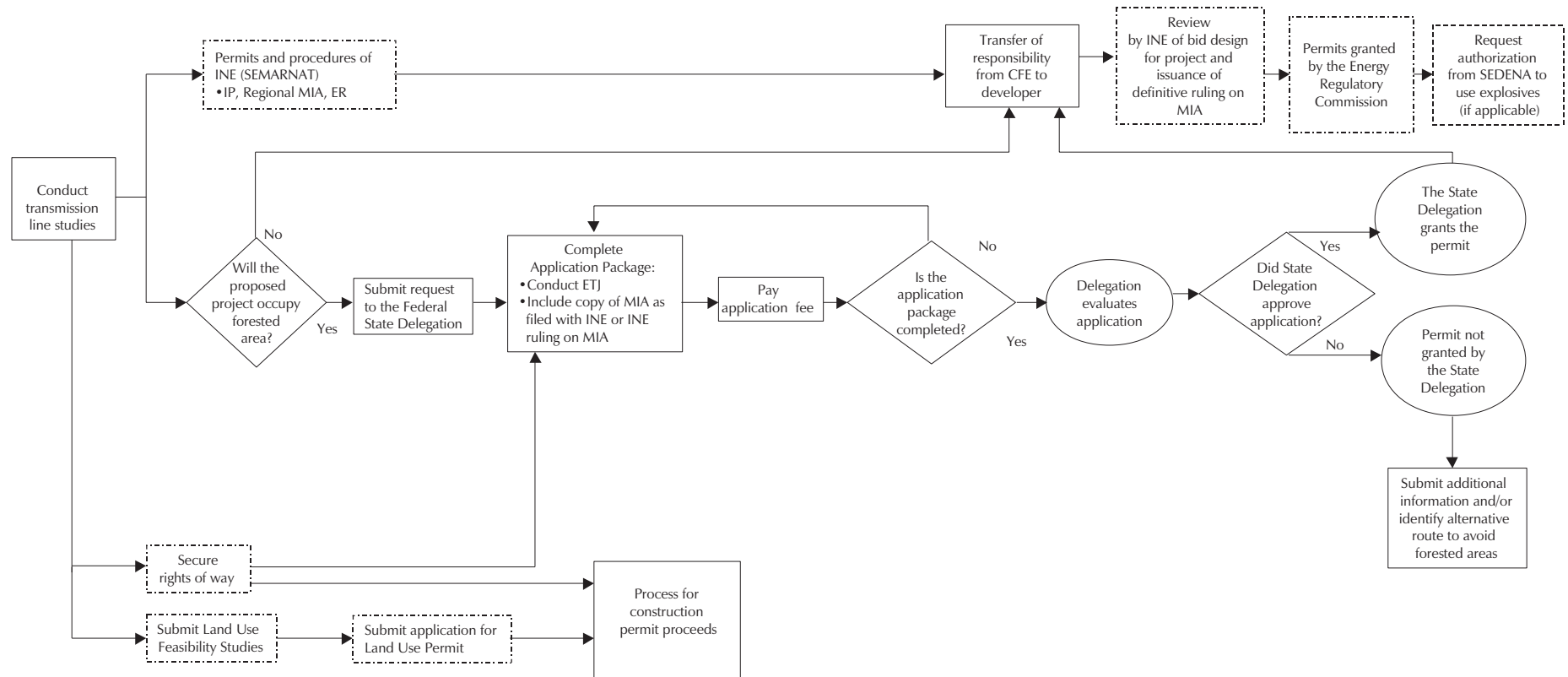
Will the project occupy forested land?

#### If the answer is yes:

*CFE* submits request to the State Delegation of SEMARNAT.

#### If the answer is no:

Figure 7: Critical Path for Federal State Delegations Permits of SEMARNAT, Optional Site



Federal Delegations of the States

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Submit request to  
the Federal State  
Delegation of  
*SEMARNAT*

Complete  
application  
package: conduct  
*ETJ*, include copy  
of *MIA* or  
preliminary ruling

Pay  
application fee

*CFE* transfers the permitting responsibilities to the developer.

#### **Administrative Procedure:**

*CFE* submits a request for a Permit for Change of Land Use in Forested Area to the State Delegation of *SEMARNAT*.

#### **Administrative Procedure:**

*CFE* prepares an *ETJ* for the project. The *ETJ* is the key document for evaluating applications for the Permit for Change of Land Use in Forested Area. To ensure project approval, the *ETJ* should demonstrate that the proposed project will not adversely impact biodiversity and that soil erosion, water quality deterioration or water resource depletion impacts are non-existent or mitigated by the project developer. Details of the requirements for the *ETJ* are included in Section 11 of Annex. The Permit for Change of Land Use in Forested Area requires a fee payment.

#### **Administrative Procedure:**

Pay application fee.

#### **Fee:**

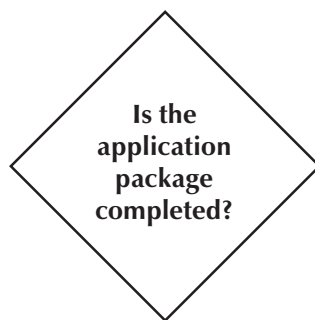
\$768 to \$5,123 Pesos, depending on the area of the project site (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

The Permit for Change of Land Use in Forested Area must contain the following:

- ◆ Name and address.
- ◆ Original and copy of the ownership title or original of the document that permits the holder to apply for the permit. In case of *ejidos* and communities, it is necessary to obtain a copy of the assembly act registered at the National Agrarian Register, which contains the agreement to make the change for land used in forested areas.

- ◆ *ETJ*.
- ◆ *MIA* or preliminary ruling.

The application materials are submitted to the State Delegation of *SEMARNAT*, which reviews them and submits them to the Central Office of *SEMARNAT* in Mexico City for technical review and comments only if the area of the project site is larger than 10 hectares. In the case of projects involving more than one state, each state level representative should receive the package. Once the Central Office has provided its technical comments to the State Delegation, the latter makes its final decision and approves or denies the application.



**Decision Point:**

Is the application package completed?

**If the answer is yes:**

The State Delegation of *SEMARNAT* evaluates the application. Wait for resolution.

**If the answer is no:**

Complete application package.

**Administrative Response:**

State Delegation of *SEMARNAT* evaluates the application.

**Decision Point:**

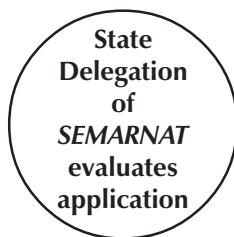
Did State Delegation of *SEMARNAT* approve application?

**If the answer is yes:**

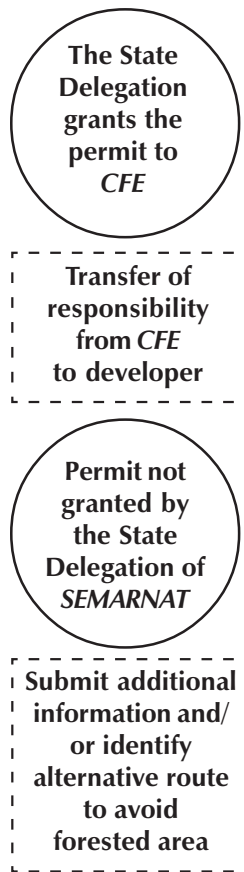
The State Delegation of *SEMARNAT* grants the permit to *CFE*.

**If the answer is no:**

The permit is not granted. *CFE* submits additional







information and/or identifies alternative route to avoid forested area.

**Administrative Response:**

The State Delegation of *SEMARNAT* grants the permit to *CFE*.

**Administrative Procedure:**

*CFE* transfers the permitting responsibility to the developer.

**Administrative Response:**

State Delegation of *SEMARNAT* did not grant the permit for change in forested area.

**Administrative Procedure:**

*CFE* submits additional information and/or identifies an alternative route to avoid crossing forested areas.

### ***B.1.5. Construction or Local Permitting Requirements***

The Constitution is the legal foundation for local regulations to protect public health and welfare through regulation of activities of various types, as well as zoning requirements by specific land uses. The Constitution asserts that state and municipal governments are free and sovereign in the areas of authority delegated to them, which include land use and construction permits.

Construction Permits are granted by the municipality after securing the following prerequisites: Land Use Feasibility Study, Land Use Permit, approval of the *MIA*, and in case of forest lands, the Permit for Land Use Change in Forested Area.

As indicated above, it should be noted that the *MIA* and the Permit for Land Use Change in Forested Area are issued by offices in each state of federal agencies—the *DGIRA* and the State Delegation, both of which are part of *SEMARNAT*.

#### **Annotations for the Construction Permit Process**

The following annotations describe each of the steps identified in Figure 8. This section is organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response.

**Table 4: Fees and Time Required by the Land Use Permitting Process**

Average time period	5 Working days
Total fees required	1,250 Pesos*

(\*Plus 18.37 Pesos per square meter of the permitted project site)

*Fees valid for July–December 2001. Please contact the local agencies for updated values. Fees will vary from municipality to municipality. Exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$.*

Signature of  
administrative  
transfer agree-  
ment between  
*CFE* and the  
developer

Confirm that the  
Land Use  
Feasibility Study  
has been approved  
and the Land Use  
Permit has  
been issued

### Administrative Procedure:

The *CFE* transfers the responsibilities of permitting process to the developer.

### Administrative Procedure:

Confirm that the Land Use Feasibility Study has been approved and a Land Use Permit issued. This will have been accomplished by *CFE* in the prebid phase of the project development.

### Fee:

\$2,252 Pesos plus \$18.37 Pesos per square meter of total surface area occupied by the project (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

### Time of Response:

Thirty (30) working days.

### Decision Point:

Has *DGIRA* of *SEMARNAT* approved the revised *MIA* and *ER*?

**If the answer is yes:**

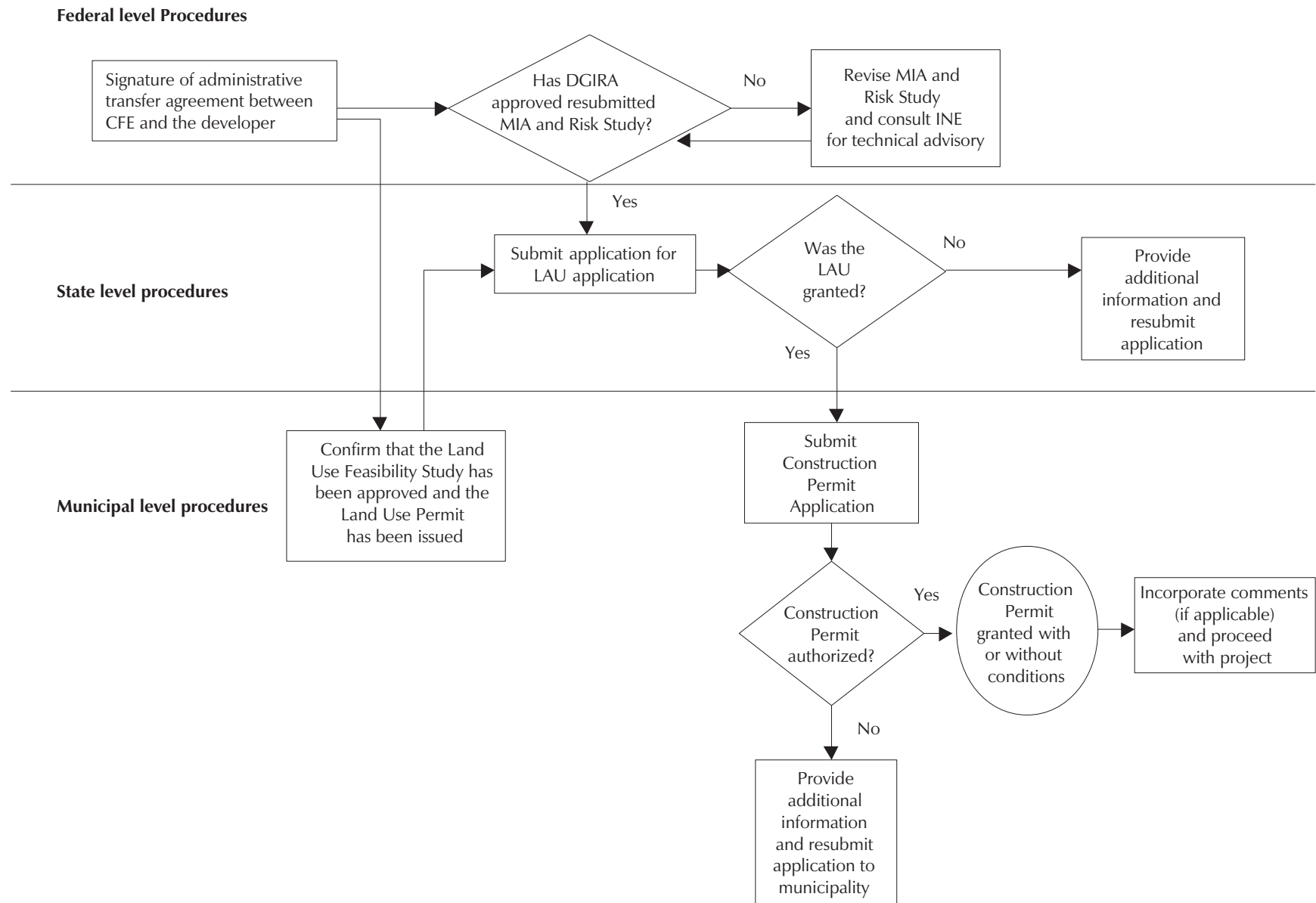
Submit application for *LAU*.

**If the answer is no:**

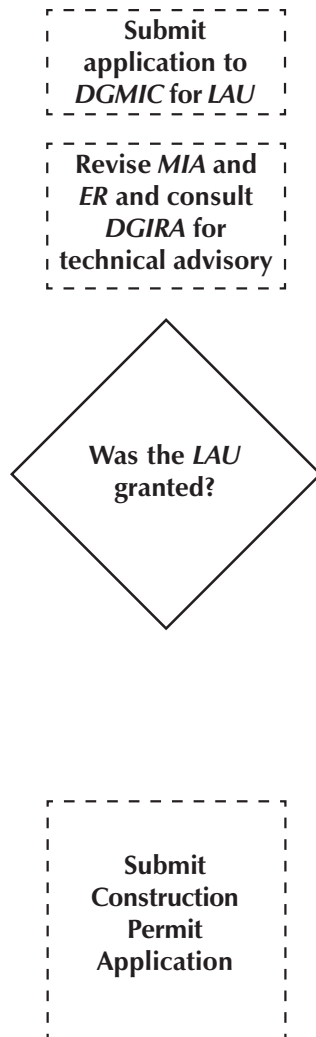
Revise *MIA* and *ER*.

Has *DGIRA*  
approved  
resubmitted  
*MIA* and *ER*?

**Figure 8: Construction Permit Process, Optional Site**



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**Administrative Procedure:**

Submit application to *DGMIC* for *LAU*.

**Administrative Procedure:**

Revise *MIA* and *ER* and consult *DGIRA* of *SEMARNAT* for technical advisory.

**Decision Point:**

Was the *LAU* granted?

**If the answer is yes:**

File the application for the Construction Permit.

**If the answer is no:**

Provide additional information and resubmit application.

**Administrative Procedure:**

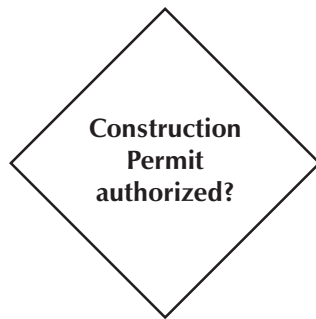
With the application for the Construction Permit, the developer should include copies of the *LAU* authorized by *DGMIC* of *SEMARNAT* and the Land Use Permit authorized by the municipality (and the Permit for Land Use Change in Forested Area from the State Delegations of *SEMARNAT* in cases where forest lands are involved). The format required for this application varies from municipality to municipality—some examples are included in Section 10 of Annex.

**Fees:**

Fees required vary, but by way of example, the Municipality of Escobedo in Nuevo León State charges \$124.86 Pesos plus \$4.10 Pesos per square meter (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

**Time of Response:**

Five (5) working days.



**Decision Point:**

Was the Construction Permit granted?

**If the answer is yes:**

Review the Construction Permit authorization status, with or without conditions.

**If the answer is no:**

Provide additional information.

**Administrative Response:**

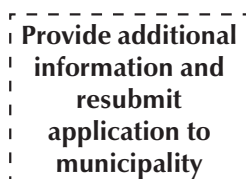
Construction Permit granted with or without conditions.

**Administrative Procedure:**

Incorporate comments (if applicable) and proceed with project.

**Administrative Procedure:**

Provide additional information and resubmit application to the municipality.



## B.2. Independent Producer—Alternative Site

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The permitting procedures for the Independent Producer—Alternative Site scenario are largely the same as those for the Independent Producer—Optional Site scenario. The major difference is that for the Alternative Site, the developer is responsible for the entire process, as opposed to taking over several of the procedures already initiated from the *CFE*. Because the developer is responsible for all procedures, the process is likely to be lengthier than in the Optional Site case, due to additional requirements of *CNA*.

This section reviews the entire process as outlined in Figure 3, adhering to the same order as used in the Optional Site case to the greatest extent possible. Specifically, the process involves the following:

- ◆ *CNA* Permits (Section B.2.1)
- ◆ *DGIRA* of *SEMARNAT* Permits (Section B.2.2)
- ◆ Federal State Delegation of *SEMARNAT* Permits (Sections B.2.3)
- ◆ Construction Permits or Local Permits (Sections B.2.4).

### B.2.1. *CNA* Permitting Requirements

*CNA* is the agency within *SEMARNAT* that regulates all issues related to water resources under federal jurisdiction. All water sources other than municipal water supplies and water in treatment systems are under the jurisdiction of *CNA*. Water sources within municipal water supply, treatment and discharge networks are considered to be under the jurisdiction of the local municipality. The legal basis for the requirements of *CNA* is the National Waters Law (*Ley de Aguas Nacionales*), which stipulates that the exploitation, use and development of any water resource must be sanctioned by *CNA* through issuance of a title of water rights (concession for government and assignment for particular).

Since water is an important requirement for most electricity generation technologies, and vital to the operation of any facility, at the very least for human consumption needs, it is the first consideration in obtaining permits for a generation facility. These permits are:<sup>13</sup>

- ◆ Permit to discharge residual water (CNA-01-001)
- ◆ Certificate of water quality (CNA-01-002)
- ◆ New concession or assignment for surface water use (CNA-01-003)
- ◆ New concession or assignment for groundwater use (CNA-01-004)

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<sup>13</sup> A list of all the environmental permits was published at the *Diario oficial* on February 21, 2000.



- ◆ Concession for material extraction (CNA-01-005)
- ◆ Concession for federal land occupation for lands managed by CNA (CNA-01-006)
- ◆ Regularization of concession or assignment for groundwater use (CNA-01-007)
- ◆ Regularization of concession or assignment for surface water use (CNA-01-008)
- ◆ Modification of concession or assignment for groundwater use (CNA-01-009)
- ◆ Modification of concession or assignment for surface water use (CNA-01-010)
- ◆ Certificate of brackish water use (CNA-01-011)
- ◆ Modification of permit for residual water discharge (CNA-01-012)
- ◆ Authorization for the transmission of titles and their registration (CNA-01-013)
- ◆ Notice of suspension of wastewater treatment system's operation (CNA-01-017)
- ◆ Request of authorization to include modifications to the hydrologic cycle (CNA-02-001)
- ◆ Permit to conduct infrastructure hydraulic work (CNA-02-002)
- ◆ Concession for the operation, conservation and management of the irrigation system and its federal hydraulic infrastructure (CNA-03-001)

For national waters under the jurisdiction of *CNA*, the main application document is called the Water Services Application. This application is actually a compendium of several certificates, permits, concessions and assignments that the developer must secure for the right to extract, use and discharge water. The Water Services Application is completed and approved by *CNA* prior to conducting environmental impact risk studies, and concurrently with the bidding process with *CFE*, if the project is for an *IPP*. Further, the Water Services Application (from *CNA*) and the environmental permits (from *DGIRA* of *SEMARNAT*) are prerequisites for obtaining the *LAU* from *DGMIC* of *SEMARNAT*, which is required for all industrial sites under federal jurisdiction, as is the case for electricity generation facilities and transmission lines. It is important to note for clarity that only steps required by *CNA* will be mentioned. The environmental permits issued by *DGIRA* of *SEMARNAT* are presented in more detail in Figure 10 and the accompanying text. The fees are established the last week of December under the Law of Federal Fees (*Ley Federal de Derechos*) and are published in the *Diario Oficial de la Federación*. All fees are updated each semester according to inflation. The fees that appear in this document are for July–December 2001.

According to *CNA*, the time required for the permitting process cannot exceed 60 (sixty) working days for each application. Furthermore, more than one permit may be requested in one single application, a measure that could reduce significantly the time required to obtain the *CNA* permits.

**Table 5: CNA Permitting Process**

<b>Permits</b>	<b>Fees Required (Pesos)</b>
Permit to discharge residual water	2,688.76
Certificate of water quality	2,599.25
New concession or assignment for surface water use	1,963.21
New concession or assignment for groundwater use	2,540.67
Concession for material extraction	831.69
Concession for federal land occupation for lands managed by CNA	2,540.68
Regularization of concession or assignment for groundwater use	1,003.95
Regularization of concession or assignment for surface water use	1,003.95
Modification of concession or assignment for groundwater use	1,003.95
Modification of concession or assignment for surface water use	1,003.95
Certificate of brackish water use	2,599.25
Modification of permit for residual water discharge	1,003.95
Authorization for the transmission of titles and their registration	1,003.95
Request of authorization to include modifications to the hydrologic cycle	1,003.95
Permit to conduct infrastructure hydraulic work	2,540.68
Concession for the operation, conservation and management of the irrigation system and its federal hydraulic infrastructure	2,673.67

*Source: Anexo de Actualización de la Ley Federal de Derechos en Materia de Agua 2000. Fees valid for July–December 2001. Please contact the CNA for updated values. Exchange rate as of 07/11/2000: 9.40\$Pesos/1US\$.*

### Annotations for the CNA Permitting Process

The following annotations describe each of the steps identified in Figure 9. This section is organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response.

Select site

**Administrative Procedure:**

The first step is selecting a site to obtain water. The water can be available on the surface, underground or even purchased as wastewater from the municipality.

Is surface water  
available?

**Decision Point:**

Is surface water available?

**If the answer is yes:**

Proceed to conduct the water quality laboratory tests with a laboratory that is recognized by the *SE*.<sup>14</sup>

**If the answer is no:**

Proceed to check if groundwater is available in a free zone (that can be explored).

Perform  
lab tests

**Administrative Procedure:**

Perform laboratory tests to identify the water quality. It is important to mention that the water tests should be performed by an institution accepted by the National Accreditation System of Test Laboratories from the *SE* and approved by *CNA*. This guarantees compliance with the water specifications required by the Federal Water Law.

Is groundwater  
available in free  
zone?

**Decision Point:**

Is groundwater available and is it in a free zone?

**If the answer is yes:**

Conduct water quality laboratory testing.

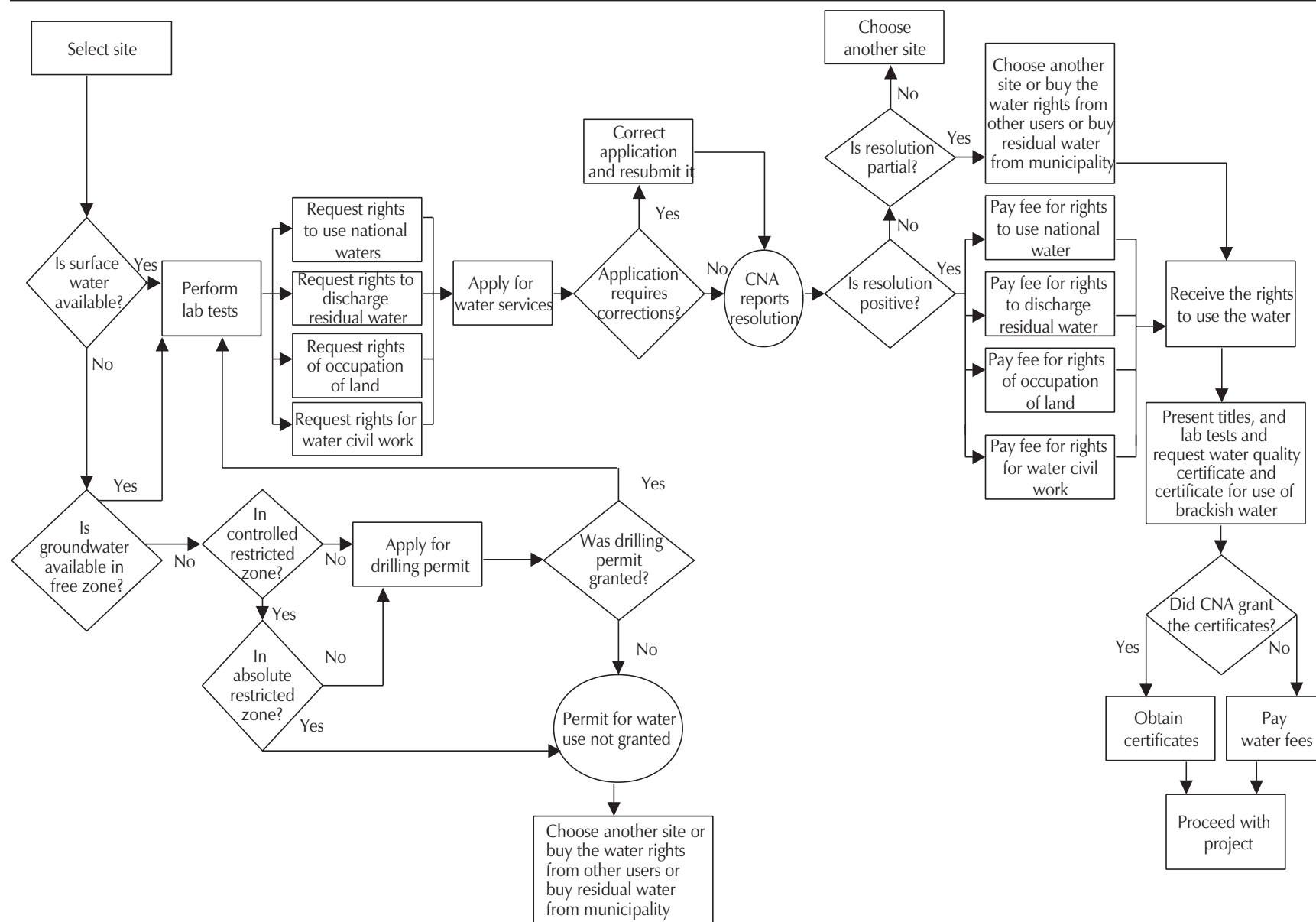
**If the answer is no:**

Check the degree of the restricted zone.

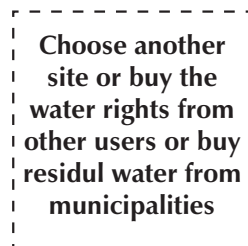
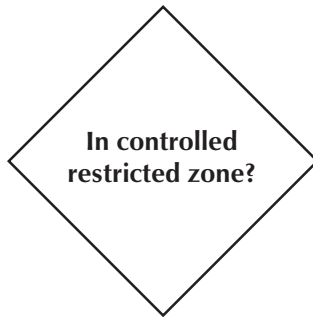
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<sup>14</sup> *CNA* requires a laboratory that is recognized and certified by the Secretariat of Economy. Otherwise, the test results will not be considered for analysis.

Figure 9: Critical Path for CNA Permits, Alternative Site



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**Decision Point:**

Is groundwater available in controlled restricted zone?

**If the answer is yes:**

Check the degree of the absolute restricted zone.

**If the answer is no:**

Apply for a Drilling Permit.

**Administrative Procedure:**

Apply for Drilling Permit. The authorities will grant the Drilling Permit at their discretion, depending on the situation.

**Decision Point:**

Was the Drilling Permit granted?

**If the answer is yes:**

Perform water quality laboratory testing.

**If the answer is no:**

Permit for water use is not granted.

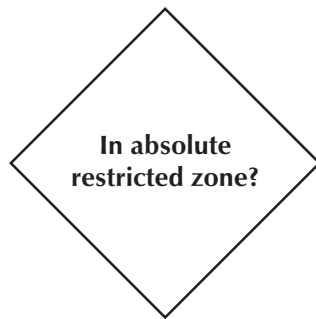
**Administrative Response:**

Permit for water use not granted for the selected site.

**Administrative Procedure:**

If permit for water use is not granted, the developer has three options:

1. Choose another site.
2. Buy the water rights from other users that have access to water close to the selected site.
3. Buy residual water from municipalities.



**Decision Point:**

In absolute restricted zone?

**If the answer is yes:**

Choose another site, buy water rights from other users or buy residual water from the municipalities.

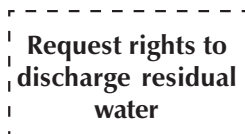
**If the answer is no:**

Apply for a Drilling Permit.



**Administrative Procedure:**

Request rights (assignment) to use national waters or Concession of National Waters Use considering whether the water origin is from the surface or underground. The surface water may be obtained from a river, lake, lagoon, dam, canal or stream.



**Administrative Procedure:**

Request rights to discharge residual water into national waters, or Permit to Discharge Residual Water.



**Administrative Procedure:**

Request rights to occupy land. The Concession for Use of Land in a Federal Zone is required for the construction of civil work at the site of the use of national waters or discharge of residual water.



**Administrative Procedure:**

Request rights for civil works in the land or federal zone previously authorized (the Civil Works Permit).

The purpose of the civil works must be established, for example, the use of national waters, discharge of residual waters, protection and so forth.





**Administrative Procedure:**

Submit application for water services. At this point, it is required to submit the complete application to *CNA* to obtain the Concession of National Waters and/or the Permit to Discharge Residual Waters and/or the Concession for Use of Land in a Federal Zone and/or the Civil Works Permit.

**Decision Point:**

Application requires corrections?

**If the answer is yes:**

Proceed to correct application and resubmit the application to *CNA*.

**If the answer is no:**

*CNA* grants a judgment statement.

**Administrative Response:**

*CNA* reports resolution.

The resolution from *CNA* can be:

1. Positive
2. Partial
3. Negative

**Decision Point:**

Is resolution positive?

**If the answer is yes:**

Pay fees and obtain water rights.

**If the answer is no:**

Is resolution partial?

**Administrative Procedure:**

Pay fee and receive receipt for Concession of National Water.

<div>Pay fee for rights to discharge residual water</div>	<p><b>Fee:</b></p> <p>\$1,963.21 Pesos (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$)</p>
<div>Pay fee for rights for occupation of land</div>	<p><b>Administrative Procedure:</b></p> <p>Pay fee and receive receipt for Permit to Discharge Residual Waters.</p> <p><b>Fee:</b></p> <p>\$2,688.76 Pesos for each discharge stream (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).</p>
<div>Pay fee for permits for civil works</div>	<p><b>Administrative Procedure:</b></p> <p>Pay fee and receive receipt for Concession for Use of Land in a Federal Zone.</p> <p><b>Fee:</b></p> <p>\$832.17 Pesos (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).</p>
<div>Receive the rights to use the water from CNA</div>	<p><b>Administrative Procedure:</b></p> <p>Pay fee and receive receipt for Civil Works Permit.</p> <p><b>Fee:</b></p> <p>\$2,540.68 Pesos (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).</p>
<div>Present titles and lab tests and request certificates of water quality and use of brackish water</div>	<p><b>Administrative Procedure:</b></p> <p>Receive the Water Rights from CNA.</p> <p><b>Administrative Procedure:</b></p> <p>Present titles of water rights and laboratory tests, and request certificates of water quality and use of brackish water.</p> <p>Results of the laboratory tests must be submitted at this stage. However, users from communities with less than 2,500 habitants or with discharged water volume of less than 300 m<sup>3</sup> per day are exempted from presenting laboratory tests.</p>



**Decision Point:**

Did CNA grant the certificates?

**If the answer is yes:**

Obtain certificates. The developer is exempted from paying any fees for water discharge.

**If the answer is no:**

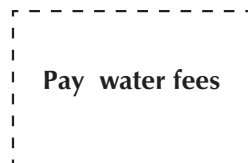
The developer must pay for fees that will depend on water quality and volume of water to be discharged.



**Administrative Procedure:**

Obtain Water Quality Certificate. This certificate has duration of 1 year and allows the user to be exempt from paying for the water if it is demonstrated that the wastewater meets the established quality standards.

Obtain Certificate for Use of Brackish Water. This certificate has duration of 3 years and it is given if the laboratory tests show that brackish water quality meets the criteria for concentration of contaminants present in the water. In this case, the user of the brackish water is exempted from paying a water-use tariff.



**Administrative Procedure:**

Pay water fees.

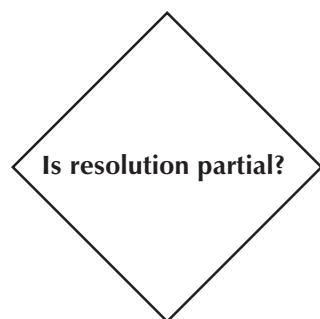
**Fees:**

Fees will vary, depending on water quality and volume of water to be discharged.



**Administrative Procedure:**

Proceed with project.



**Decision Point:**

Is resolution from *CNA* partial?

**If the answer is yes:**

Choose another site, buy water rights from other users, or buy residual water from the municipalities. Then receive water rights from *CNA*.

**If the answer is no:**

Choose another site.



**Administrative Procedure:**

Choose another site. Water rights were not granted by *CNA* for this site.

The regulations developed by *CNA* (with input from *SEMARNAT*) are enforced by *CNA* when they involve municipal and private discharges into bodies of water under federal jurisdiction (effectively most bodies of water in Mexico). The standards governing industrial and municipal discharges into federal waters (*NOM 001 ECOL 1996*, enforced by *CNA*) establish a baseline in accordance with which discharge fees are established. These standards have tended to be fairly strict for discharges into rivers and lakes (artificial or natural) when the receiving body of water is considered vital for the preservation of fauna and aquatic life, and slightly more lenient when the effluent is to be used for agricultural irrigation or municipal use for purposes that do not require potable water. However, specific industries have their own standards that apply regardless of the industry's location.<sup>15</sup>

*CNA* does not have jurisdiction over industrial discharges into municipal sewer systems (accounting for 40 percent of all industrial effluents), which are regulated by *NOM 002 ECOL 1996*, and enforced by the municipality. However, because municipalities are responsible for the quality of the wastewater they discharge into federal waters, they have an incentive to ensure that companies pretreat their effluent.

### **B.2.2. DGIRA of SEMARNAT Permitting Requirements**

The legal basis for these requirements is *LGEEPA* and the most recent rulemaking on environmental impact issues, the *RIA* of May 30, 2000, which addresses a broad range of environmental issues concerning Mexico, including protection of natural areas, rational exploitation of natural resources and measures for controlling atmospheric, soil and water contamination.

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<sup>15</sup> International Trade Administration, Mexico Environmental Market Plan: Water Pollution Control (1999): 2-3.

There are two main environmental permits that must be obtained before the developer can proceed to file for a Construction Permit at the municipal level. The first one is the approval of the *MIA*, which is required before the second one, the *LAU*, also granted at the federal level, may be obtained. The Construction Permit is granted by the municipality after the following additional prerequisites have also been fulfilled: Land Use Feasibility Study, Land Use Permit, approval of the *MIA*, and in case of forest lands, the Permit for Land Use Changes in Forested Area.

The *LAU* is granted at the federal level of *SEMARNAT*, after the following two prerequisites have been completed: the Water Use Permit (from *CNA*) and approval of the *MIA* (from *DGIRA* of *SEMARNAT*)—which implies presentation and approval of the *IP* and *ER* if required. It is important to note for the purpose of clarity this section mentions only the steps required by *SEMARNAT*. The Construction Permit, which is given at the municipal level, is analyzed in more detail in Figure 12.

The *LAU* is required for all industrial sites, including those considered to be under federal jurisdiction, as is the case with electricity generation facilities. One of the main factors that may delay issuance of the permits may be the presence of public opposition (the procedure for answering public comments may take up to 65 additional working days beyond the normal time period). The fees are established the last week of December by the Federal Rights Law and appear in the *Diario Oficial de la Federación*. All fees are adjusted each quarter according to inflation. The fees that appear in this document are for July–December 2001.

The *COA* is the annual certificate that is required for all industrial sites and must be renewed every year. It constitutes the extension of the *LAU* after the first year of operation covered by the first filing for the *LAU*. The time required for obtaining the *COA* is not considered here.

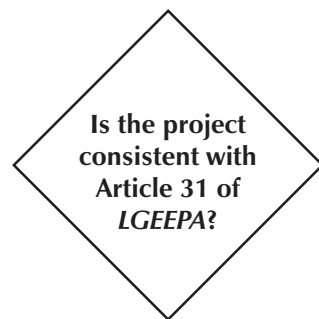
**Table 6: DGIRA of SEMARNAT Permitting Process**

Average time period	245 Working days (roughly 1 calendar year)
Total fees required	22,986 Pesos

*Fees valid for July–December 2001. Please contact SEMARNAT for updated values.  
Exchange rate as of 07/11/2001: 9.40\$Pesos/1US.*

#### Annotations for the *DGIRA* of *SEMARNAT* Permitting Process

The following annotations describe each of the steps identified in Figures 10 and 11. The annotations are organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response.



**Decision Point:**

Is the project consistent with Article 29 of *Reglamento de la Ley General del Equilibrio Ecológico y la Protección al Ambiente en Materia de Evaluación del Impacto Ambiental* or Article 31 of the *LGEEPA*?

**If the answer is yes:**

Submit *IP*.

**If the answer is no:**

Submit *MIA*.



**Administrative Procedure:**

Submit *IP*. It is necessary to present an original and four copies to *DGIRA* at the state where the project would be developed. One of the copies must state “For Public Consultation” (*Para Consulta Pública*). Also, it is necessary to present the original and three copies of the fee payment using the format SHCP-5 with code #400099 for reception and evaluation. In addition, the developer must include a copy of the project in electronic format on a 3.5" diskette using Microsoft Word for Windows as well as an original and four copies at an adequate scale.

Once complete information has been provided and no further information is required, the *IP* will be published in the *Environmental Gazette* for public review. The published file will only contain information that does not affect private property, according to Article 33 of the *LGEEPA*.



**Administrative Response:**

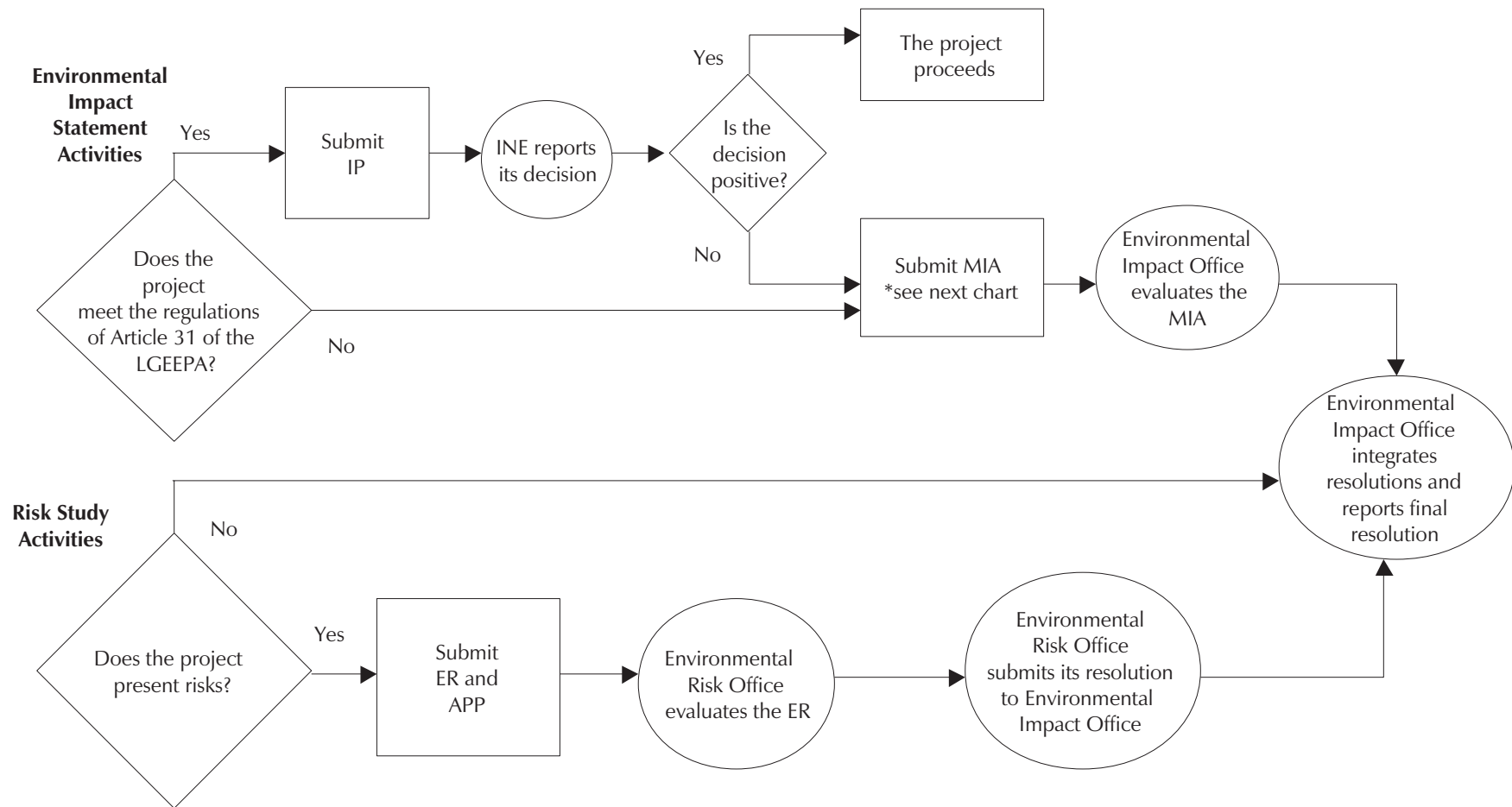
*DGIRA* reports its resolution based on the *IP*.

**Decision Point:**

Does *DGIRA* confirm that the project is consistent with the law?



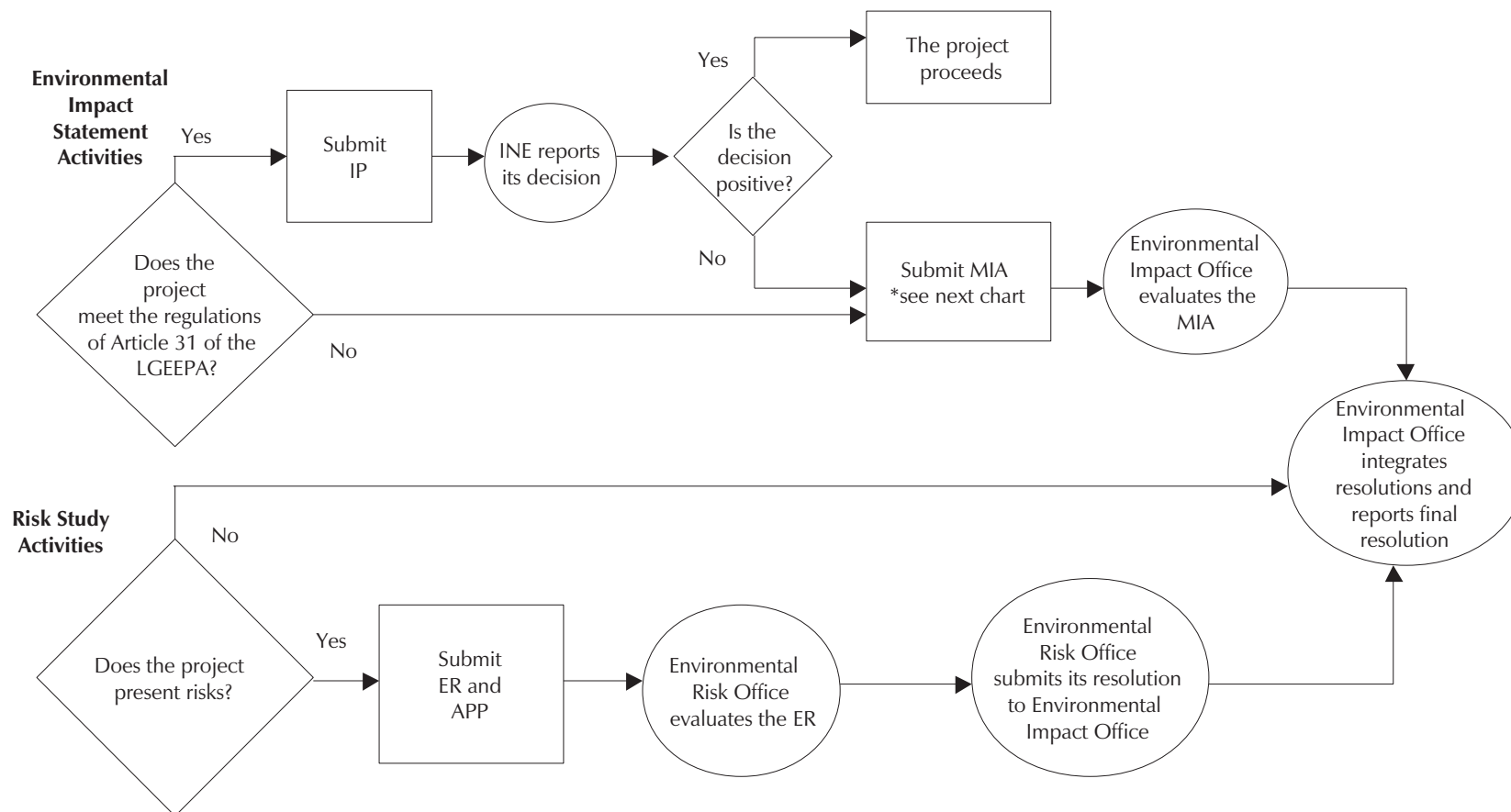
Figure 10: Critical Path for *DGIRA* of *SEMARNAT* Permitting Process, Alternative Site



**All procedures occur at the federal level**



Figure 11: Critical Path for *DGIRA* of *SEMARNAT* Permitting Process, Alternative Site (Cont'd)



All procedures occur at the federal level

**If the answer is yes:**

Proceed with the project.

**If the answer is no:**

Submit a *MIA* for further evaluation of the project.

**Administrative Procedure:**

The developer may proceed with the project.

**Administrative Procedure:**

Submit *MIA*.

**Administrative Response:**

*DGIRA* evaluates *MIA*.

*(DGIRA of SEMARNAT evaluates the environmental impact of the project and the environmental risk of the project simultaneously.)*

**Decision Point:**

Does the project present any risks?

**If the answer is yes:**

Submit an *ER* and an Accident Prevention Program (*Programa de Prevención de Accidentes*, or *APP*) to the Secretariats of Energy, Development, Industry, Health, and Labor and Social Security.

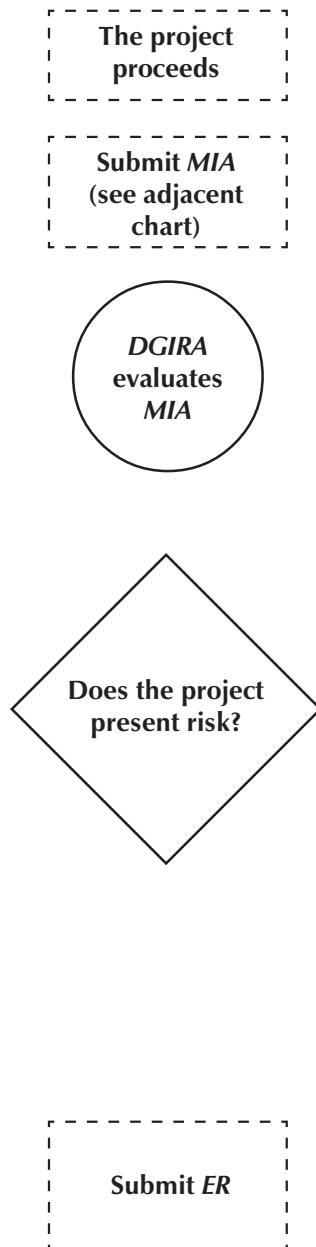
**If the answer is no:**

*DGIRA* integrates resolutions and notifies the developer.

**Administrative Procedure:**

Submit *ER* along with fee payment.

The *ER* might be required if the project has highly risky activities according to the list published by the *Diario Oficial de la Federación* on April 28, 1990, and May 4, 1992. In this case, request the format entitled “Inventory of High Risk Industries” to



define the *ER* modality to be presented to the *Ventanilla Unica* of *DGIRA* of *SEMARNAT*. There are four modalities of Risk Study: Preliminary Risk Report, Risk Analysis, Detailed Risk Analysis and Land Ducts. See Section 8 of the Annex for details on the required contents of Risk Study.

The *ER* must include an Executive Summary of the pertinent activities.

**Fees:**

\$611 Pesos (level 0), \$934 Pesos (level 1), \$566 Pesos (level 2), \$1,898 Pesos (level 3) (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

**Administrative Procedure:**

Submit *APP* to the Secretariats of Energy, Development, Industry, Health and Labor and Social Security.

**Administrative Response:**

The *DGIRA* evaluates *ER*.

**Administrative Response:**

The *DGIRA* integrates the impact resolution with the risk resolution.

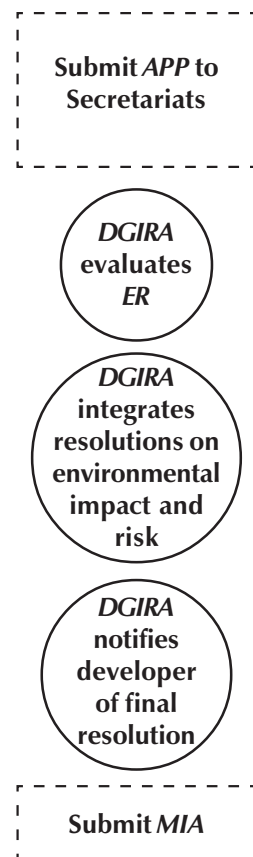
**Administrative Response:**

The *DGIRA* notifies the developer of final resolution. (\*adjacent chart: Figure 11.)

**Administrative Procedure:**

Submit *MIA*.

An *MIA* is required when an *IP* is not enough to analyze the impact of the project can cause on the environment, or when the project does not comply with the regulations established by the law.<sup>16</sup> See Sections 5 and 6 of the Annex for the required contents of an *MIA*.



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<sup>16</sup> Article 31 of *LGEEPA* or Article 29 of *RIA*.

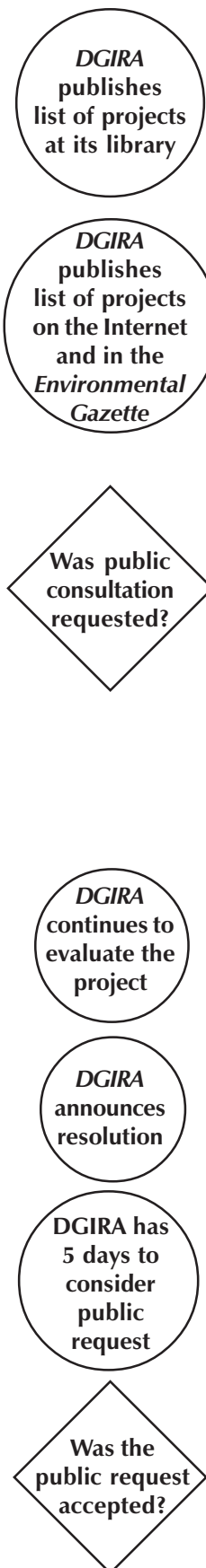
It is necessary to present an original and four copies of the *MIA* in a file to *DGIRA* of *SEMARNAT* at the state where the project would be developed. One of the copies must state "For Public Consultation" (*Para Consulta Pública*). Also, it is necessary to present the original and three copies of the fee payment using the format SHCP-5 with code # 400099 for reception and evaluation. In addition, the developer must include a copy of the project in electronic format on a 3.5" diskette using Microsoft Word for Windows, as well as an original and four copies at an adequate scale.

As stated before, the *MIA* should be presented in either one of two modalities: Regional or Particular.

The Regional modality of the *MIA* refers to the projects with the following characteristics:

1. Industrial and aquiculture parks, aquiculture farms of more than 500 hectares, highways and railroads, projects of nuclear energy generation, dams, and in general, projects that affect the hydrologic areas.
2. Activities or civil works included in the plan or partial program of urban development or ecologic regulation presented to *DGIRA* of *SEMARNAT* according to the terms covered by Article 22 of the *RIA*.
3. Civil work projects and activities that are planned to be performed in an ecological region.
4. Projects to be developed in sites in which as a result of the interaction with the different environmental regional components, it is foreseen to have cumulative synergic or residual impacts that could cause the destruction, isolation or fragmentation of the ecosystems.

The Particular modality of the *MIA* refers to all the other cases not covered by the Regional modality.



**Administrative Response:**

*DGIRA* publishes at its library the list of projects that have applied for permits.

**Administrative Response:**

*DGIRA* publishes list of projects that have applied for permits on the Internet and in the *Environmental Gazette*.

The community has 10 days from *DGIRA*'s publication of the list of projects to request public consultation.

**Decision Point:**

Was public consultation requested?

**If the answer is yes:**

*DGIRA* has 5 days from the notification day to consider public request.

**If the answer is no:**

*DGIRA* continues to evaluate the project without public interference.

**Administrative Response:**

*DGIRA* continues to evaluate the project without public interference.

**Administrative Response:**

*DGIRA* announces its final resolution.

**Administrative Response:**

*DGIRA* has 5 days from the notification day to consider public request.

**Decision Point:**

Did *DGIRA* accept public request?

**If the answer is yes:**

The developer has 5 days from the notification day to publish a summary of the project in a local newspaper.

**If the answer is no:**

*DGIRA* announces final resolution.

The developer publishes a summary of the project in a local newspaper (within 5 days from notification)

The public has 10 days to request a copy of the summary

Is an assembly needed?

The public has 20 days to review project

*DGIRA* has 5 days to call for assembly

*DGIRA* incorporates comments to its resolution

**Administrative Procedure:**

The developer has 5 days from the notification day to publish a summary of the project in a local newspaper.

**Administrative Response:**

The public has 10 days from the day the summary of the project was published to request a copy of it for review.

**Decision Point:**

Is an assembly needed?

**If the answer is yes:**

*DGIRA* has 5 days to convoke a public assembly, which cannot last more than 1 day.

**If the answer is no:**

The public has 20 days to review the project.

**Administrative Response:**

The public has 20 days to review the project and send comments to *DGIRA*.

**Administrative Response:**

*DGIRA* has 5 days to convoke a public assembly.

**Administrative Response:**

*DGIRA* incorporates the public comments into its resolution.



Positive resolution,  
partial resolution or  
negative resolution

### Administrative Response:

*DGIRA* announces its final resolution.

### Administrative Procedure:

1. Positive resolution: Proceed with project.
2. Partial resolution: Modify project or incorporate conditions.
3. Negative resolution: Choose another site.

## Summary of Fees and Time Requirements for Environmental Permitting Activities

The time required for the permitting process is significant. The entire process can last up to 245 business days. Current regulations establish maximum periods of time for *DGIRA* of *SEMARNAT* to complete specific administrative procedures, as indicated in Table 7. The fees collected for each procedure are established in special legislation passed every year in conjunction with the passage of the federal budget. The currently available fees are presented in Table 8.

**Table 7: Time Required for the Permitting Process of *DGIRA* of *SEMARNAT***

Assessment, Review and Ruling	Time Period
Preventative Report (IP)	20 business days
Public comments on IP (if required)	65 business days
Environmental Impact Assessment (MIA)	60 business days
Public comments of MIA (if required)	65 business days
Risk Study (ER)	30 business days

Source: *SEMARNAT*

**Table 8: Fees for Permitting Process of *DGIRA* of *SEMARNAT***

Administrative Process	Fees in Pesos
<b>Reception and Evaluation Fees:</b>	
Preventative Report (IP)	3,272
MIA—Regional	13,056
MIA—Particular	6,316
Risk Study (ER)	611–1,890
<b>Authorization Fees:</b>	
Preventative Report (IP)	403
MIA—Regional	1,100
MIA—Particular	741
Risk Study (ER)	0

table continues on to next page



**Table 8: Fees for Permitting Process of DGIRA of SEMARNAT (continued)**

Administrative Process	Fees in Pesos
<i>Revalidation Fees:</i>	
MIA—Regional	1,444
MIA—Particular	525

Source: *SEMARNAT*

Fees valid for July–December 2001. Please contact *SEMARNAT* for updated values. Exchange rate as of 07/11/2001: 9.40Pesos\$/1US\$.

### **B.2.3. State Delegation of SEMARNAT Permit for Change of Land Use in Forested Areas**

It is important to note that the Permit for Change of Land Use in Forested Area is given only in those cases when the relevant technical and environmental studies demonstrate that the proposed project will not adversely impact biodiversity and that soil erosion, water quality deterioration or water resource depletion impacts are nonexistent or mitigated by the project developer. The permit is issued by the State Delegations of *SEMARNAT*. The Central Office of *SEMARNAT* is consulted for technical advice only for projects that have site areas larger than 10 hectares. The legal basis for this requirement is the Forest Law (*Ley Forestal*) of May 20, 1997, and the Forest Regulation (*Reglamento Forestal*) of September 25, 1998.

**Table 9: State Delegation of SEMARNAT Permitting Process**

Average time period	50 Working days
Total fees required (depending on the area extension)	768–5,123 Pesos

Fees valid for July–December 2001. Please contact the Federal State Delegations of *SEMARNAT* for updated values. Exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$.

### **Annotations for the State Delegation of SEMARNAT Permitting Process**

The following annotations describe each of the steps identified in Figure 12. This section is organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response.

Conduct  
transmission line  
studies

Will the project  
occupy a forested  
area?

Submit request  
to the State  
Delegation of  
*SEMARNAT*

Complete  
application  
package: conduct  
*ETJ*, include copy  
of *MIA* or ruling  
on *MIA*

Pay application  
fee

**Administrative Procedure:**

Conduct transmission line studies.

**Decision Point:**

Does the project occupy forested land?

**If the answer is yes:**

Submit request to the State Delegation of *SEMARNAT*.

**If the answer is no:**

Proceed with project.

**Administrative Procedure:**

Submit a request to the State Delegation of *SEMARNAT* for consideration of an application for a Permit for Change of Land Use in Forested Area.

**Administrative Procedure:**

Prepare an *ETJ* for the project. The *ETJ* is the key document used for evaluating applications for the Permit for Change of Land Use in Forested Areas. To ensure project approval, the *ETJ* should demonstrate that the proposed project will not adversely impact biodiversity and that soil erosion, water quality deterioration or water resource depletion impacts are non-existent or mitigated by the project developer. Details of the requirements for the *ETJ* are included in Sections 9 and 11 of the Annex.

The application process requires a fee payment.

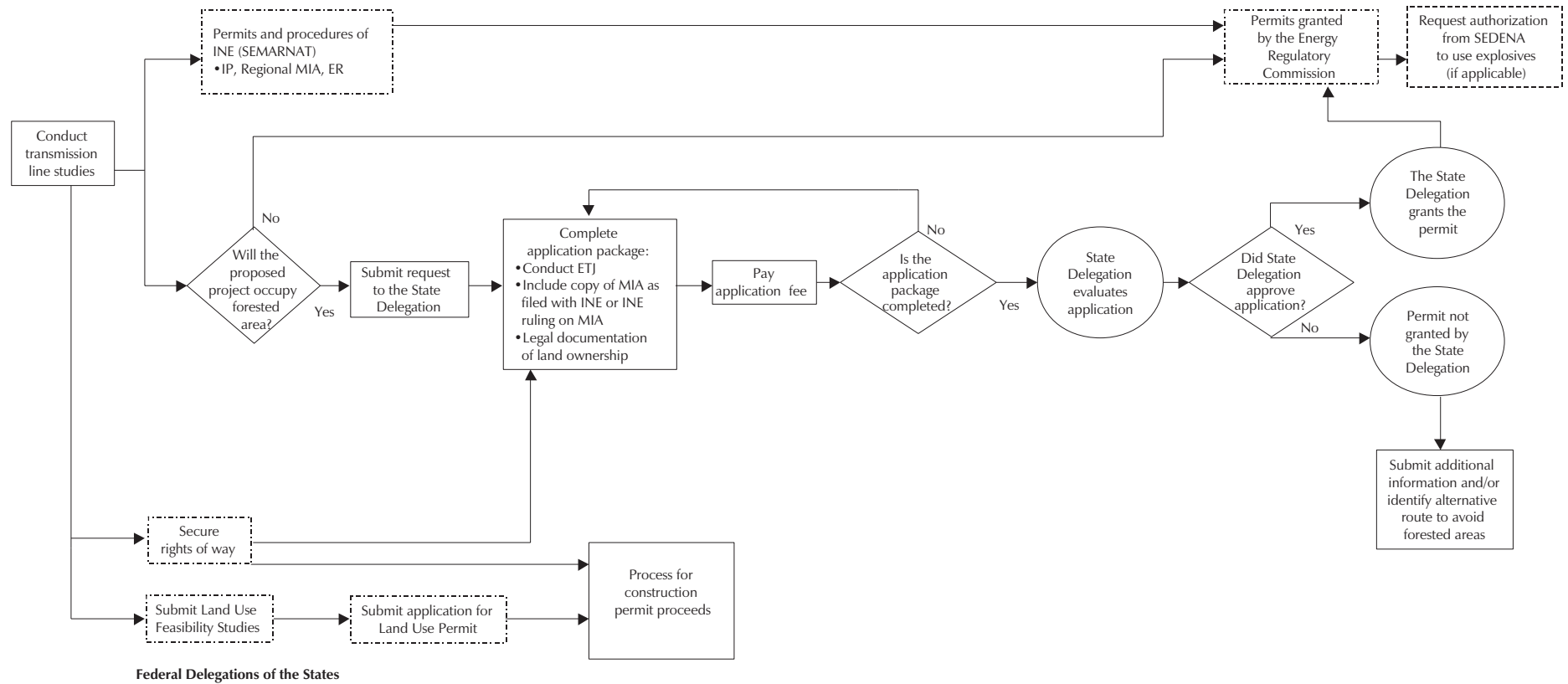
**Administrative Procedure:**

Pay application fee.

**Fee:**

\$768–5,123 Pesos, depending on the area of the project site (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

**Figure 12: Critical Path for State Delegation of SEMARNAT Permitting Process, Alternative Site**



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The application for the Permit for Change of Land Use in Forested Area must contain the following:

- ◆ Name and address.
- ◆ Original and copy of the ownership title or original of the document that permits the holder to apply for the permit. In case of *ejidos* and communities, it is necessary to obtain a copy of the assembly act registered at the National Agrarian Register, which contains the agreement to make the change of land use in forested areas.
- ◆ *ETJ*.
- ◆ *MIA* or preliminary ruling.

The application materials are submitted to the State Delegation of *SEMARNAT*, which reviews them and submits them to the Central Office of *SEMARNAT* in Mexico City for technical review and comments only if the area of the project site is larger than 10 hectares. In the case of projects involving more than one state, each state level representative should receive the package. Once the Central Office of *SEMARNAT* has provided its technical comments to the State Delegation, the latter makes its final decision and approves or denies the application.

**Decision Point:**

Is the application package completed?

**If the answer is yes:**

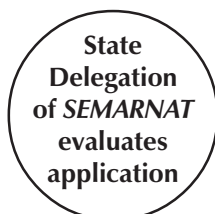
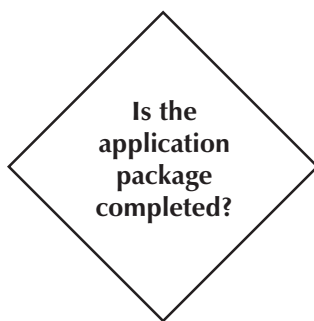
Wait for final resolution from the State Delegation of *SEMARNAT*.

**If the answer is no:**

Complete application package.

**Administrative Response:**

State Delegation of *SEMARNAT* evaluates application for permit.





**Decision Point:**

Did State Delegation of *SEMARNAT* approve application?

**If the answer is yes:**

The State Delegation of *SEMARNAT* grants the permit.

**If the answer is no:**

The permit is not granted.

**Administrative Response:**

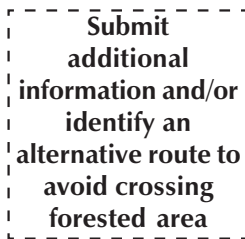
The State Delegation of *SEMARNAT* grants the permit.

**Administrative Response:**

State Delegation of *SEMARNAT* did not grant the Permit for Change of Land Use in Forested Area.

**Administrative Procedure:**

Submit additional information and/or identify an alternative route to avoid crossing forested area.



#### ***B.2.4. Construction or Local Requirements***

The Constitution is the legal foundation for local regulations to protect public health and welfare through regulation of activities of various types, as well as zoning requirements by specific land uses. The Constitution asserts that state and municipal governments are free and sovereign in the areas of authority delegated to them, which include Land Use and Construction Permits.

Construction Permits are granted by the municipality upon fulfillment of the following prerequisites: Land Use Feasibility Study, Land Use Permit, approval of the *MIA*, and in case of forest lands, the Permit for Change of Land Use in Forested Area.

As noted above, the *MIA* and the Permit for Change of Land Use in Forested Area are issued by federal agencies—*DGIRA* and the State Delegations, both of which are part of *SEMARNAT*.

**Table 10: Land Use Permitting Process**

Average time period	5 Working days
Total fees required	1,250 Pesos*

(\* plus 18.37 Pesos per square meter of the permitted project site)

*Fees valid for July–December 2001. Please contact the local agencies for updated values. Fees will vary from municipality to municipality. Exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$.*

### Annotations for the Construction or Local Permit Process

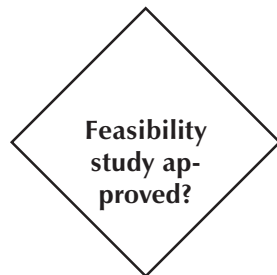
The following annotations describe each of the steps identified in Figure 13. This section is organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response.

Submit Land  
Use Feasibility  
Study

#### Administrative Procedure:

Submit Land Use Feasibility Study.

The Land Use Feasibility Study is the first step that the local municipality has to review for granting the Land Use Permit.



#### Decision Point:

Is the Land Use Feasibility Study approved?

**If the answer is yes:**

Submit application for Land Use Permit.

**If the answer is no:**

Provide additional information.

Submit  
application for  
Land Use Permit

#### Administrative Procedure:

Submit application for Land Use Permit.



#### Decision Point:

Was the Land Use Permit granted?

**If the answer is yes:**

Submit application for *LAU*.

Submit  
application for  
*LAU*

**If the answer is no:**

Check if the project crosses forested land.

**Administrative Procedure:**

Submit the application for the *LAU* along with the fee payment.

**Fee:**

\$3,177 Pesos (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

**Time of Response:**

Seventy (70) working days, with an extension of 60 working days if necessary.

The *LAU* is required for all industrial establishments considered fixed sources of federal jurisdiction regarding pollution preventative and control measures. The generation of electric energy is considered a fixed source of federal jurisdiction, among 14 other industries: oil, chemistry, petrochemical, steel, paper, cement, automotive, painting, glass, metallurgical, cellulose, asbestos, lime and treatment of hazardous wastes. Details of the *LAU* application form are presented in Section 12 of the Annex.



**Decision Point:**

Was *LAU* granted?

**If the answer is yes:**

Submit Construction Permit application.

**If the answer is no:**

Provide additional information.

Submit  
application for  
Construction  
Permit

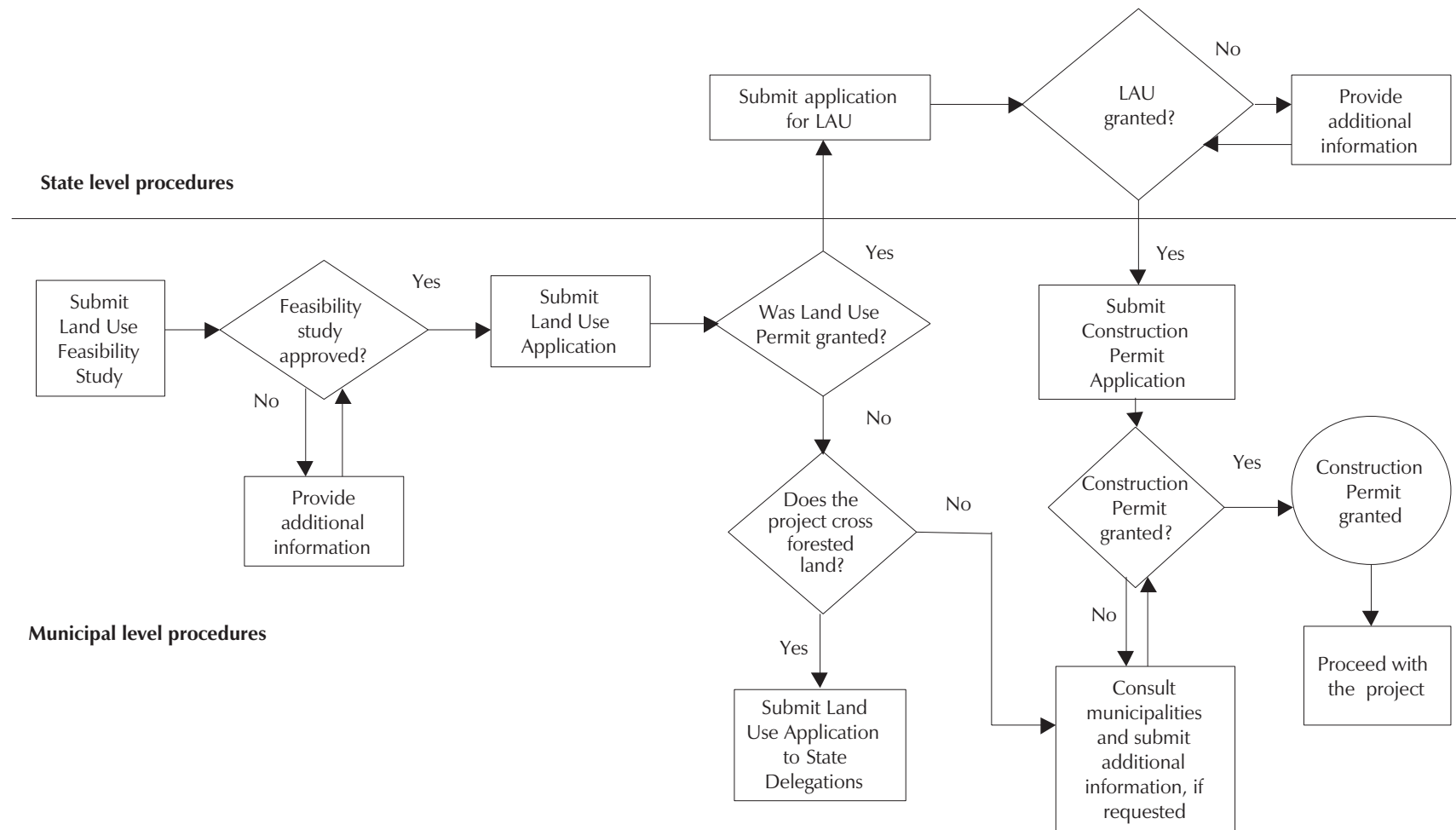
**Administrative Procedure:**

Submit application for Construction Permit.

The application for the Construction Permit should include copies of the necessary prerequi-



Figure 13: Construction or Local Permit Process, Alternative Site



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sites: *LAU* authorized by *DGMIC* of *SEMARNAT* and the Land Use Permit authorized by the municipality (and the Permit for Change of Land Use in Forested Area approved by the State Delegation of *SEMARNAT* in the case of forest lands, as described in Figure 10). Submission of the Construction Permit application will also require payment of a fee.

**Fees:**

Fees will vary from municipality to municipality, but in the case of Apodaca, \$124.86 Pesos, plus \$4.10 Pesos per square meter (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

**Time of Response:**

Five (5) working days.

**Decision Point:**

Was the Construction Permit granted?

**If the answer is yes:**

Proceed with the project.

**If the answer is no:**

Submit additional information.

**Administrative Response:**

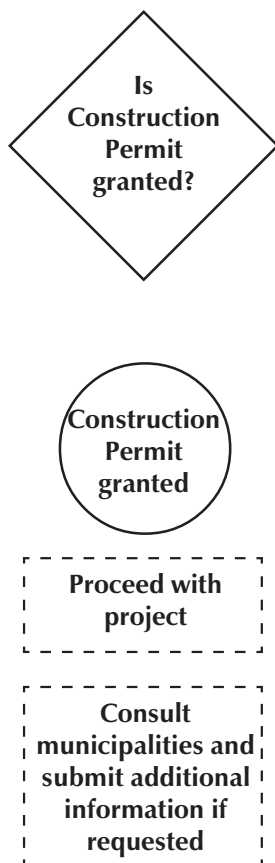
Construction Permit granted.

**Administrative Procedure:**

Proceed with the project.

**Administrative Procedure:**

Consult municipalities and submit additional information if requested.





Submit application  
for Permit for  
Change of Land  
Use in Forested  
Area to  
*SEMARNAT*

Submit additional  
information

**Decision Point:**

Does the project cross forested area?

**If the answer is yes:**

Submit application for a Permit for Change of Land Use in Forested Area to the State Delegation of *SEMARNAT*.

**If the answer is no:**

Consult municipalities and submit additional information, if requested.

**Administrative Procedure:**

Submit application for a Permit for Change of Land Use in Forested Area to the State Delegation of *SEMARNAT*.

**Administrative Procedure:**

Submit additional information.

## PART C. ELECTRIC TRANSMISSION PROJECTS

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Part C reviews the requirements for transmission projects. It is assumed that the project is being implemented by a private entity under the self-supply or import/export permits. In the case of private transmission projects, all administrative responsibility rests with the developer. In Part C there are three figures: Overview of Permitting Process for Transmission Lines, Critical Path for the State Delegation of Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*, or **SEMARNAT**) and Critical Path for the General Office of Environmental Impact & Risk (*Dirección General de Impacto y Riesgo Ambiental*, or **DGIRA**) of **SEMARNAT**. Each figure is accompanied by annotations to give the user an explanation of each step in the figure. In addition, the time and cost requirements for each permit are provided.

According to the Law on Public Service of Electricity (*Ley del Servicio Público de Energía Eléctrica*, or **LSPEE**), private entities are permitted to construct electric transmission lines for transfers of electricity within Mexico, or for the import or export of power. Several import permits have been issued by the Energy Regulatory Commission (*Comisión Reguladora de Energía*, or **CRE**). In addition, there are several U.S.-based companies that have obtained the U.S. electric power export permit (referred to as a Presidential Permit) and are studying potential transmission projects to carry electricity from the United States to Mexico.

The regulatory procedures relevant to transmission projects in Mexico may be grouped according to the following three categories: federal requirements, state requirements and municipal or local level requirements.

- ◆ *Federal requirements.* These relate to the environmental procedures, principally the Preventative Notice (*Informe Preventivo*, or **IP**), the Environmental Impact Assessment (*Manifestación de Impacto Ambiental*, or **MIA**), the Risk Study (*Estudio de Riesgo*, or **ER**), and the Permit for Change of Land Use in Forested Area issued by the State Delegations of **SEMARNAT**. Each of these is relevant to generation projects as well, but the permit that is most likely to pose a significant obstacle to the completion of the project is that of the Land Use Permit.
- ◆ *State requirements.* State authorities are primarily involved through the State Delegations of **SEMARNAT**, which assist in the execution of federal requirements, both in the context of **SEMARNAT**'s review of the **MIA** as well as in the review of the Permit for Change of Land Use in Forested Area.
- ◆ *Local requirements.* Local authorities are involved in the permitting process in the issuance of the Land Use Permit and the Construction Permit, which are granted at the municipal level.



## C.1. Overview of the Permitting Process

The following section reviews the overall permitting process for a transmission line project. It is assumed that the project is being implemented by a private entity under the self-supply or import/export permits, without involvement of the Federal Electricity Commission (*Comisión Federal de Electricidad*, or *CFE*), since all transmission projects undertaken by *CFE* will remain under its administration, and hence no transfer of administrative responsibility is required. In the case of private transmission projects, as in that of the Alternative Site projects in Section B.2, all administrative responsibility rests with the developer.

### *Annotations for the Transmission Permit Process*

The following annotations describe each of the steps identified in Figure 14. This section is organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response.

Submit site studies  
and acquisition of  
R/W (if the project  
crosses forested area)

#### **Administrative Procedure:**

Submit site studies and acquisition of rights of way. The process begins with the preparation of site studies for the transmission line, and the acquisition of the required rights of way. This step may take a significant amount of time if there are a large number of owners involved. At the same time, a Land Use Feasibility Study will be required by the municipalities involved to obtain the Land Use Permit.

Clearly, the extent to which existing rights of way may be used for part or all of the required transmission line will simplify the process of negotiating rights of way, as well as obtaining environmental permits for those segments of the line.

Submit notification  
of project to  
*SEMARNAT*

#### **Administrative Procedure:**

Submit notification of project to *SEMARNAT*, after the rights of way are obtained.

According to federal standards, certain projects do not require environmental authorization based on the presentation of the *IP* or *MIA*. *DGIRA* of *SEMARNAT* has 10 business days to decide whether or not the project is exempted

from obtaining environmental authorization.

To qualify for exemption, the project must comply with two federal standards (*Normas Oficiales Mexicanas*, or *NOMs*): *NOM-113-ECOL-1998* and *NOM-114-ECOL-1998*.

*NOM-113-ECOL-1998* states the environmental protection specifications for planning, design, construction, operation and maintenance of power or distribution electric substations that are planned for areas designated for urban, suburban, rural, agricultural, industrial, urban equipment or service and tourist uses.

*NOM-114-ECOL-1998*, meanwhile, lays out the environmental protection specifications for planning, design, construction, operation and maintenance of electrical lines at the transmission and subtransmission levels that are intended to be located in areas designated for the uses noted above.

If the project as planned does not comply completely with *NOM-113-ECOL-1998* (for electric substations) or with *NOM-114-ECOL-1998* (transmission and subtransmission lines), then it is necessary to submit the *MIA* in the required modality, Regional or Particular, along with the fee payment.

**Fees:**

\$13,056 Pesos (Regional) or \$6,316 Pesos (Particular) (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

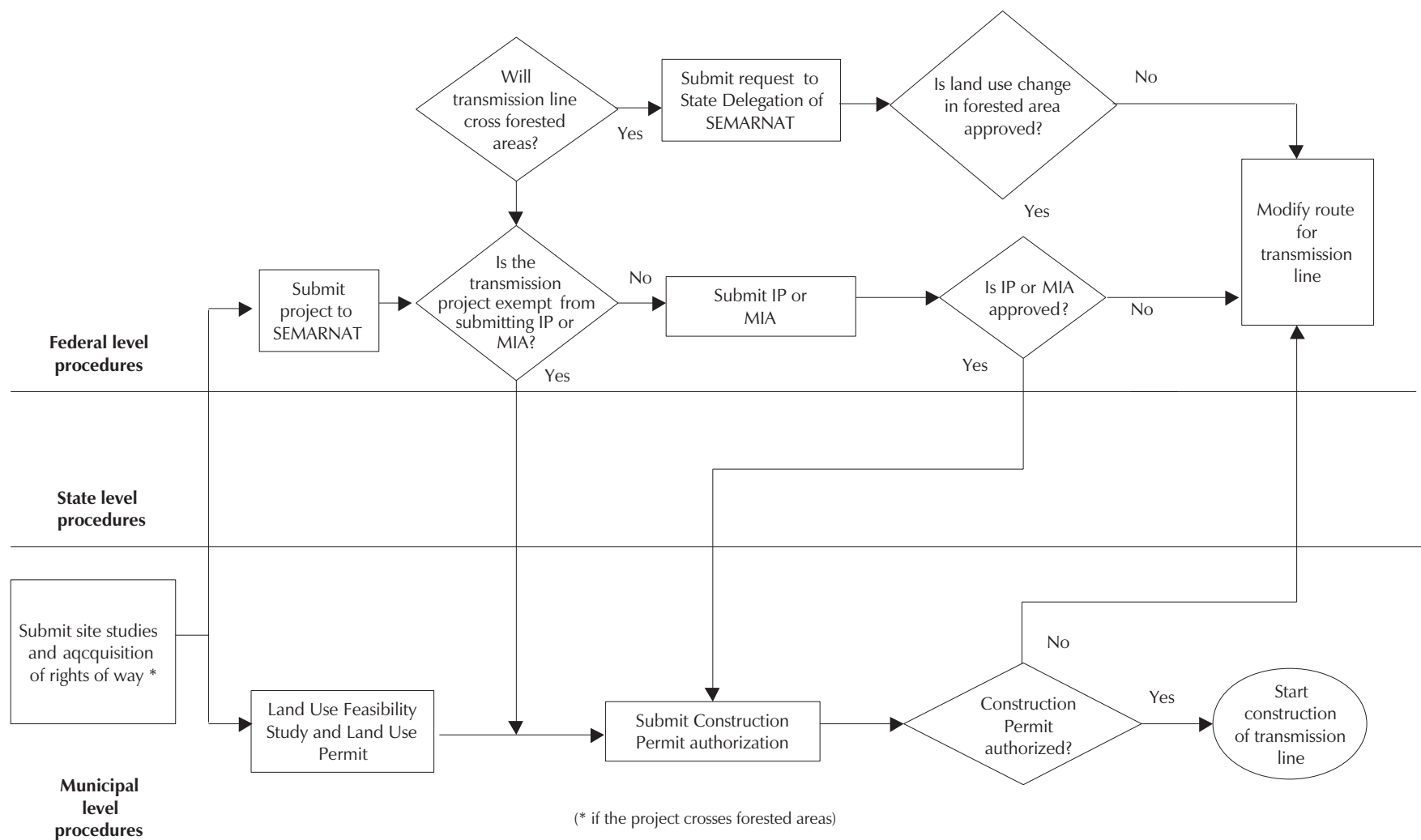
**Time of Response:**

Sixty (60) business days.

If segments of the transmission line fall under the exempted project types specified by the current regulations on environmental impact statements, *SEMARNAT* will ratify the exemption of those segments after evaluating the *MIA*. In this case, an *IP* may not be required.



Figure 14: Overview of Permitting Process for Transmission Lines



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Submit Land Use  
Feasibility Study and  
Land Use Permit

Will transmission  
line cross  
forested area?

Submit request to  
State  
Delegation of  
*SEMARNAT*

#### **Administrative Procedure:**

Submit Land Use Feasibility Study and Land Use Permit.

#### **Decision Point:**

Will transmission line cross forested areas?

#### **If the answer is yes:**

Submit the request for a Permit for Change of Land Use in Forested Area to the State Delegation of *SEMARNAT*, along with the fee payment.

#### **If the answer is no:**

Check with the *DGIRA* of *SEMARNAT* if the transmission project is exempt from submitting *IP* or *MIA*.

If a project site area is larger than 10 hectares, the State Delegation will consult the Central Office of *SEMARNAT* for its technical opinion. In this case, it is important to mention that the permit is only issued in exceptional circumstances. In several cases, the State Delegation may require modifications of the project route.

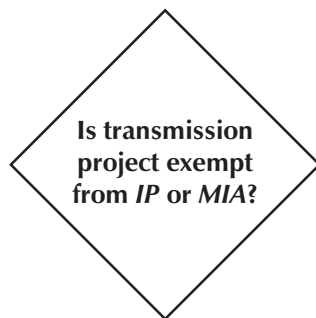
It is important to mention that the consultation with the Central Office of *SEMARNAT* is an internal procedure and the State Delegations of *SEMARNAT* will give the final resolution.

#### **Administrative Procedure:**

Submit request to State Delegation of *SEMARNAT* and pay fee.

#### **Fee:**

\$768–5,123 Pesos, depending on the area of the project site (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).



**Time of Response:**

Fifty (50) business days. If the permit is approved, it will take 20 more business days and requires payment of a permit fee.

**Fee:**

The Permit for Change of Land Use in Forested Area is \$529 Pesos at the National Forest Register. If no answer is received after this time, the response should be considered positive. This process is described in greater detail in Section C.2.

**Decision Point:**

Is the transmission project exempt from submitting an *IP* or *MIA*?

**If the answer is yes:**

And if the Land Use Permit was obtained, submit the Construction Permit application along with the fee payment.

**Fees:**

Fees will vary from municipality to municipality. For example, in Apodaca, Nuevo León, a fee of \$124.86 Pesos plus \$4.10 Pesos per square meter is required (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

**Time of Response:**

Five (5) business days.

**If the answer is no:**

Submit the *IP* or the *MIA* along with the fee payment.

**Fees:**

An *IP* is \$3,272 Pesos, or a fee of \$13,056 Pesos for a Regional *MIA*, or a fee of \$6,316 Pesos for a Particular *MIA* (exchange rate as of 07/11/2001:

9.40\$Pesos/1US\$). This process is described in greater detail in Section C.3.



**Decision Point:**

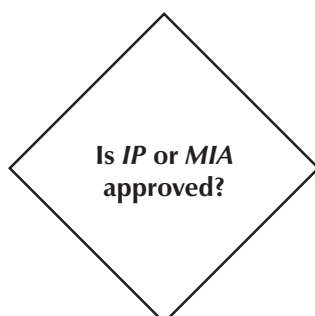
Was the Permit for Change of Land Use in Forested Area approved?

**If the answer is yes:**

Check the *IP* or *MIA* authorization status.

**If the answer is no:**

It is necessary to modify the transmission line route and to submit it to *DGIRA* of *SEMARNAT* and to the State Delegation of *SEMARNAT* for new evaluation.



**Decision Point:**

Is the *IP* or *MIA* authorized?

**If the answer is yes:**

Submit application for the Construction Permit along with the fee payment.

**Fees:**

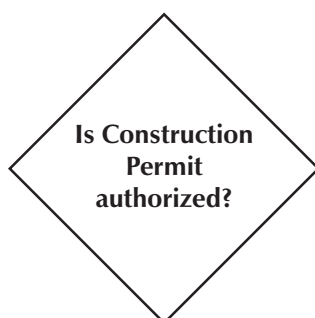
Fees will vary from municipality to municipality. For example, in Apodaca, Nuevo León, a fee of \$124.86 Pesos plus \$4.10 Pesos per square meter is required (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

**Time of Response:**

Five (5) business days.

**If the answer is no:**

Modify route for transmission line and consult with the *DGIRA* of *SEMARNAT* and the State Delegation of *SEMARNAT* regarding the new route.



**Decision Point:**

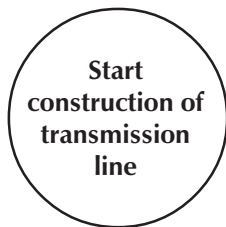
Is the Construction Permit authorized?

**If the answer is yes:**

Review the Construction Permit authorization status—with or without conditions. The conditions imposed on the permit will determine whether or not special measures will have to be taken during construction and operation of the transmission line.

**If the answer is no:**

Modify route for transmission line and repeat the process at *DGIRA* of *SEMARNAT* and at State Delegation of *SEMARNAT*, if necessary.



**Administrative Response:**

Start construction of transmission line. The environmental and land-use permits have been approved.

**Administrative Procedure:**

Modify route for transmission line. The Permit for Change of Land Use in Forested Area was not approved, or the *IP* or the *MIA* was not approved.

## C.2. Land Use Change Permit for Forested Areas

It is important to note that the Permit for Change of Land Use in Forested Area is given only in those cases where the relevant technical and environmental studies demonstrate that the proposed project will not adversely impact biodiversity and that soil erosion, water quality deterioration or water resource depletion impacts are nonexistent or mitigated by the project developer. The Federal State Delegation of **SEMARNAT** grants the permit. If the project site area is larger than 10 hectares, the Federal State Delegation of **SEMARNAT** will consult with the Central Office of **SEMARNAT** for its technical opinion. The legal basis for this requirement is the Forest Law (*Ley Forestal*) of May 20, 1997, and the Forest Regulation (*Reglamento Forestal*) of September 25, 1998.

**Table 11: Fees and Time Required in the Land Use Permitting Process**

Average time period	50 Working days*
Total fees required	\$768–\$5,123 Pesos**

(\*Plus 20 working days to obtain the registration of the authorized permit at the National Forest Register. \*\*Depending on the area extension, plus a fee of \$495 Pesos to register the Permit for Change of Land Use in Forested Areas at the National Forest Register.) Fees valid for July–December 2001. Please contact the local agencies for updated values. Fees will vary from municipality to municipality. Exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$.

### Annotations for the Federal State Delegations of SEMARNAT Permitting Process

The following annotations describe each of the steps identified in Figure 15. This section is organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure or Administrative Response.

Conduct  
transmission line  
studies

#### Administrative Procedure:

Conduct transmission line studies to determine the area required for the implementation of the transmission lines.

#### Decision Point:

Does the project occupy forested land?

#### If the answer is yes:

Submit request to the State Delegation of **SEMARNAT**.



**If the answer is no:**

Continue with the permit process at the *CRE*.

Submit request to  
State Delegation of  
*SEMARNAT*

**Administrative Procedure:**

Submit a request to the State Delegation of *SEMARNAT* for consideration of an application for a Permit for Change of Land Use in Forested Area.

Complete  
application  
package: conduct  
*ETJ*; include  
copy of *MIA*  
or ruling on *MIA*;  
include legal  
documentation of  
land ownership

**Administrative Procedure:**

Complete application package. Prepare Technical Justification Study (*ETJ*) for the project. The *ETJ* is the key document for evaluating applications for the Permit for Change of Land Use in Forested Area. To ensure project approval, the *ETJ* should demonstrate that the proposed project will not adversely impact biodiversity and that soil erosion, water quality deterioration or water resource depletion impacts are nonexistent or mitigated by the project developer. Details of the requirements for the *ETJ* are included in Section 11 of the Annex.

The Permit for Change of Land Use in Forested Area Application requires a fee payment.

Pay application  
fee

**Administrative Procedure:**

Pay application fee.

**Fee:**

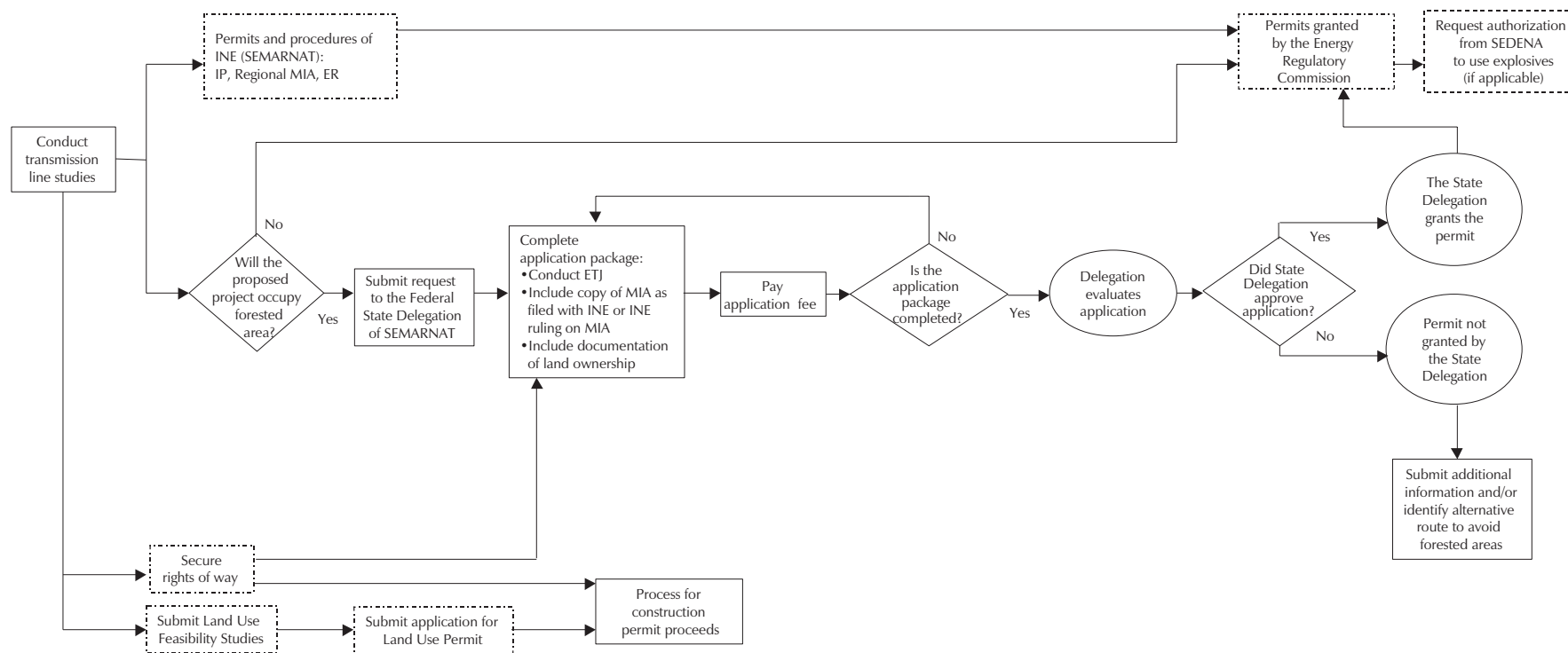
Depending on the area of the project site, \$723 to \$4,823 Pesos (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).

The Permit for Change of Land Use in Forested Area must contain the following:

- ◆ Name and address.
- ◆ Original and copy of the ownership title or original of the document that permits the holder to apply for the permit. In the cases of *ejidos* and communities, it is necessary to obtain a copy of the assembly act registered at



**Figure 15: Critical Path for Federal State Delegations of SEMARNAT Permitting Process**



Federal Delegations of the States

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the National Agrarian Register, which contains the agreement to make the change of land used in forested areas.

- ◆ *ETJ*.
- ◆ *MIA* or preliminary ruling.

The application package is submitted to the State Delegation of *SEMARNAT*, which reviews the package and submits it to the Central Office of *SEMARNAT* in Mexico City for technical review and comments if the area of the project site is larger than 10 hectares. In the case of projects involving more than one state, each state level representative should receive the package. Once the Central Office of *SEMARNAT* has provided its technical comments to the State Delegation, the delegations make their final decision, approving or not approving the application.

**Decision Point:**

Is the application package completed?

**If the answer is yes:**

Wait for final resolution from the State Delegation of *SEMARNAT*.

**If the answer is no:**

Complete application package.

**Administrative Response:**

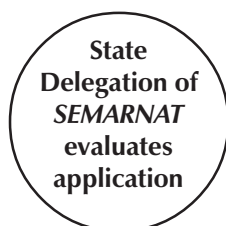
State Delegation of *SEMARNAT* evaluates application.

**Decision Point:**

Did State Delegation of *SEMARNAT* approve application?

**If the answer is yes:**

The State Delegation of *SEMARNAT* grants the permit.



SEMARNAT  
grants the  
permit

Permit not  
granted by  
SEMARNAT

Submit additional  
information and/  
or identify an  
alternative route  
to avoid crossing  
forested areas

**If the answer is no:**

The permit is not granted. Submit additional information and/or identify alternative route to avoid forested areas.

**Administrative Response:**

The State Delegation of *SEMARNAT* grants the permit.

**Administrative Response:**

State Delegation of *SEMARNAT* did not grant the permit for change in forested area.

**Administrative Procedure:**

Submit additional information and/or identify an alternative route to avoid crossing forested areas.

### C.3. **DGIRA of SEMARNAT Permitting Requirements for Transmission Lines**

The legal basis for these requirements is the General Law on Ecological Equilibrium and Environmental Protection (*Ley General de Equilibrio Ecológico y Protección al Ambiente*, or **LGEEPA**) and the most recent rulemaking on environmental impact issues, the Regulation on Environmental Impact (*Reglamento del Impacto Ambiental*, or **RIA**) of May 30, 2000, which addresses a broad range of environmental issues, including protection of natural areas, rational exploitation of natural resources, and measures for atmospheric control, soil and water contamination. There is one environmental permit that must be obtained before the developer can file for a Construction Permit at the municipal level, that is the **MIA**.

Finally, the Construction Permit is granted by the municipality after the following additional prerequisites have also been fulfilled: the Land Use Feasibility Study, Land Use Permit, approval of the **MIA**, and in case of forest lands, the Permit for Change of Land Use in Forested Area.

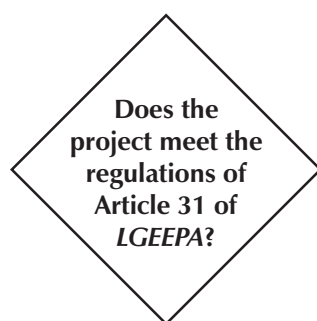
**Table 12: Fees and Time Required by the DGIRA of SEMARNAT Permitting Process**

Average time period	120 Working days (roughly 6 months)
Total fees required	\$13,073 Pesos

*Fees valid for July–December 2001. Please contact SEMARNAT for updated values. Exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$.*

#### **Annotations for the DGIRA of SEMARNAT Permitting Process**

The following annotations describe each of the steps identified in Figure 16. The annotations are organized to follow the Critical Path Diagram from top to bottom and left to right, with separate sections for each Decision Point, Administrative Procedure, or Administrative Response.



#### **Decision Point:**

Is the project consistent with Article 31 of the **LGEEPA** or Article 29 of the **RIA**?

#### **If the answer is yes:**

Submit **IP**.

#### **If the answer is no:**

Submit **MIA**.

Submit *IP*

#### Administrative Procedure:

Submit *IP*. It is necessary to present an original and four copies of the *IP* to the correspondent State Delegation of *SEMARNAT* where the project is to be developed. One of the copies must state "For Public Consultation" (*Para Consulta Pública*). Also, it is necessary to present the original and three copies of the fee payment using the format SHCP-5 with code #400099 for reception and evaluation. The developer must also include a copy of the project in electronic format on a 3.5" diskette, using Microsoft Word for Windows, as well as an original and four copies at an adequate scale.

Once complete information has been provided and no further information is required, the *IP* will be published in the *Environmental Gazette*, a local newspaper, for public review. The file will contain information that does not affect private property, according to Article 33 of *LGEEPA*.

#### Administrative Response:

*DGIRA* reports its resolution based on the *IP*.

#### Decision Point:

Does *DGIRA* confirm that the project is consistent with Article 31 of *LGEEPA*?

#### If the answer is yes:

Proceed with the project.

#### If the answer is no:

Submit an *MIA* for further evaluation of the project.

#### Administrative Procedure:

The developer may proceed with the project. There is no need to submit an *MIA*.

#### Administrative Procedure:

Submit *MIA*.

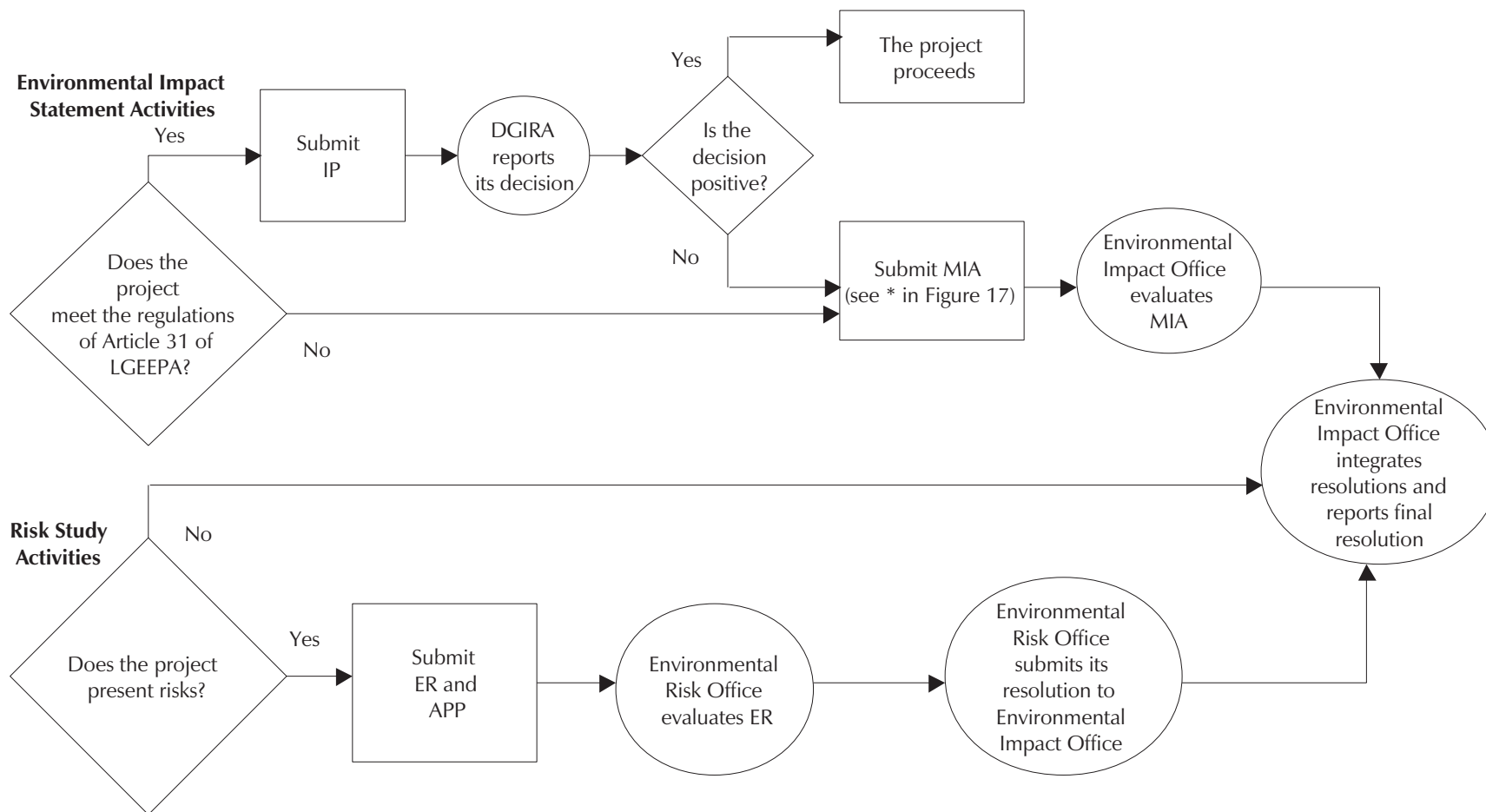
*DGIRA*  
reports its  
resolution

Does *DGIRA*  
confirm the project  
is consistent with  
Article 31 of  
*LGEEPA*?

The project  
proceeds

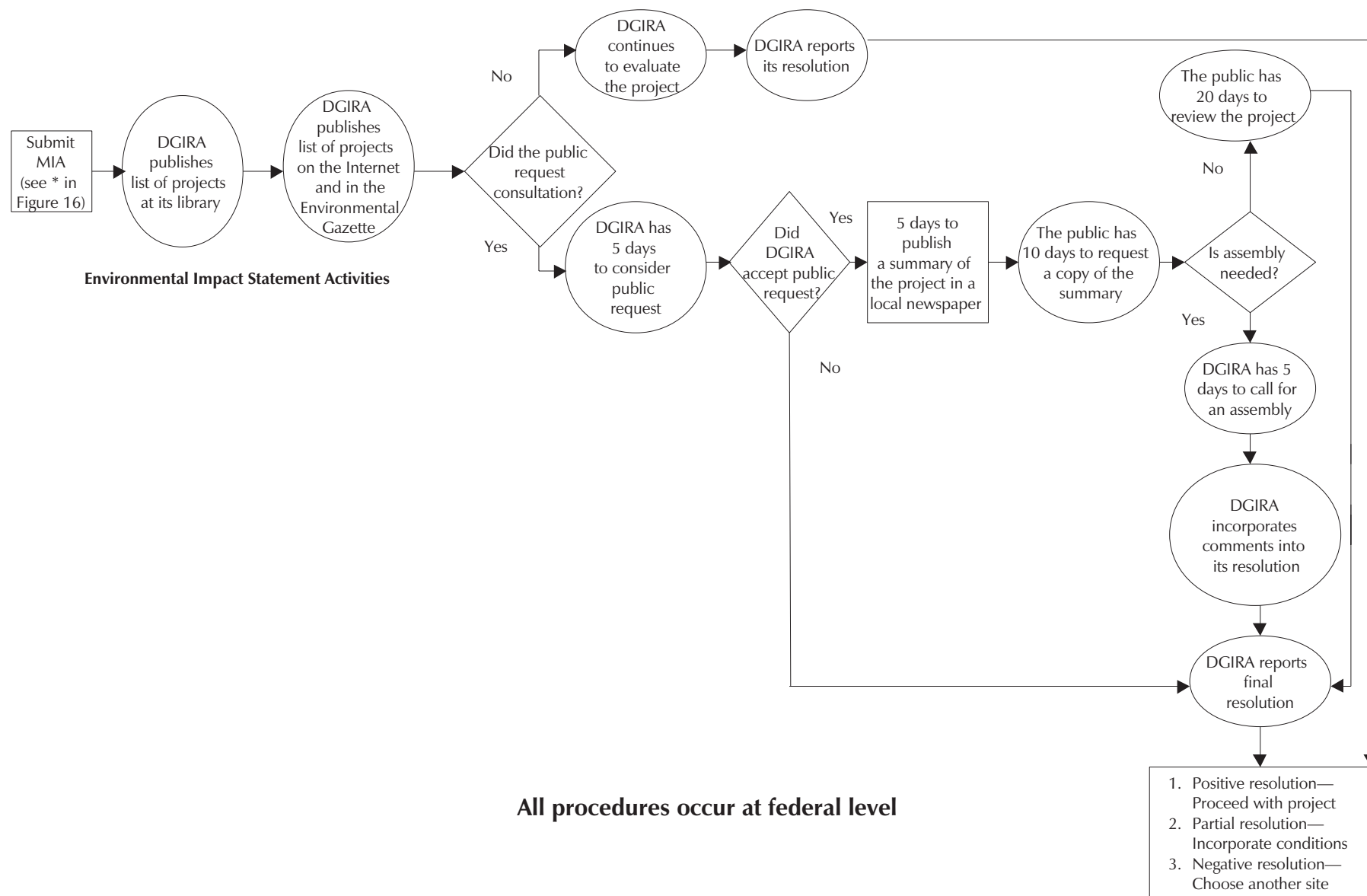
Submit *MIA*  
(see Figure 17)

Figure 16: Critical Path for DGIRA of SEMARNAT Permitting Process

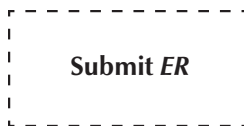


All procedures occur at federal level

Figure 17: Critical Path for DGIRA of SEMARNAT Permitting Process (Cont'd)







### Administrative Response:

*DGIRA* evaluates the *MIA*.

(*DGIRA* of *SEMARNAT* evaluates to the environmental impact of the project and the environmental risk of the project simultaneously.)

### Decision Point:

Does the project present any environmental risks?

#### If the answer is yes:

Submit *ER* and an Accident Prevention Program (*Programa de Prevención de Accidentes*, or *APP*) to the Secretariats of Energy, Development, Commerce, Health and Labor and Social Security.

#### If the answer is no:

The *DGIRA* integrates resolutions and notifies the developer of final resolution.

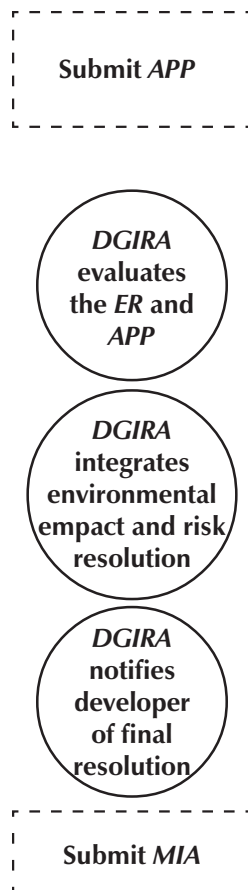
### Administrative Procedure:

Submit *ER* along with the fee payment.

An *ER* might be required if the project involves highly risky activities, according to the list published by the *Diario Oficial de la Federación* on April 28, 1990 and May 4, 1992. In this case, request the format entitled, "Inventory of High Risk Industries" to define the *ER* modality to be presented to the *Ventanilla Unica* of *DGIRA*. There are four modalities of an *ER*: Preliminary Risk Report, Risk Analysis, Detailed Risk Analysis and Land Ducts. See Section 8 of the Annex for details on the required contents of an *ER*. The *ER* must include an Executive Summary of the activities.

### Fees:

Level 0: \$611 Pesos , Level 1: \$934 Pesos, Level 2: \$566 Pesos, Level 3: \$1,898 Pesos (exchange rate as of 07/11/2001: 9.40\$Pesos/1US\$).



#### **Administrative Procedure:**

Submit *APP* to the Secretariats of Energy, Development, Commerce, Health and Labor and Social Security. The *APP* responds to contingencies incurred by integrated pollutants.

#### **Administrative Response:**

*DGIRA* evaluates the *ER* and *APP*.

#### **Administrative Response:**

*DGIRA* integrates the environmental impact and environmental risk resolution.

#### **Administrative Response:**

*DGIRA* reports the final resolution to the developer. (\*See adjacent chart Figure 17.)

#### **Administrative Procedure:**

Submit *MIA*.

An *MIA* is required when an *IP* is not enough to analyze the impact of the project on the environment, or when the project does not comply with the regulations established by the law.<sup>17</sup> See Sections 5 and 6 of the Annex for the required contents of an *MIA*.

It is necessary to present an original and four copies of the *MIA* in a file to the *DGIRA* of *SEMARNAT* office at the correspondent state where the project will be developed. One of the copies must state "For Public Consultation" (*Para Consulta Pública*). Also, it is necessary to present the original and three copies of the fee payment using the format SHCP-5 with code #400099 for reception and evaluation. In addition, the developer must include a copy of the project in electronic format on a 3.5" diskette using Microsoft Word for Windows, as well as the original and four copies at an adequate scale.

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<sup>17</sup> Article 31 of *LGEEPA* or Article 29 of the regulation of *LGEEPA*.

As stated before, the *MIA* should be presented in either one of two modalities: Regional or Particular.

The Regional modality of the *MIA* refers to the projects with the following characteristics:

1. Industrial and aquiculture parks, aquiculture farms of more than 500 hectares, highways and railroads, projects of nuclear energy generation, dams, and in general, projects that affect the hydrologic areas.
2. Activities or civil works included in the plan or partial program of urban development or ecologic regulation presented to *SEMARNAT* according to the terms covered by Article 22 of the *RIA*.
3. Civil work projects and activities that are planned in an ecological region.
4. Projects to be developed in sites where the interaction with the different environmental regional components is foreseen to have cumulative, synergic or residual impacts that could cause the destruction, isolation or fragmentation of the ecosystems.

The Particular modality of the *MIA* refers to all other cases not covered by the Regional modality.

#### **Administrative Response:**

*DGIRA* publishes at its library the list of projects that have applied for permitting permits.

#### **Administrative Response:**

*DGIRA* publishes projects that have applied for permitting permits on the Internet and in the *Environmental Gazette*.

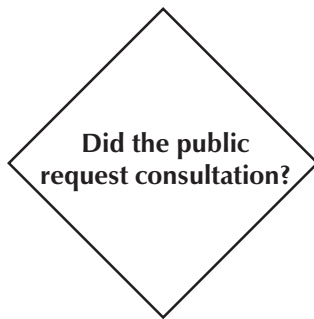
The community has 10 days from the day of *DGIRA*'s publication to request public consultation.



*DGIRA*  
publishes list  
of projects at  
its library



*DGIRA*  
publishes list  
of projects on  
the Internet  
and in the  
*Environmental  
Gazette*



**Decision Point:**

Did the public request public consultation?

**If the answer is yes:**

*DGIRA* has 5 days from the notification day to consider public request.

**If the answer is no:**

*DGIRA* continues to evaluate the project without public interference.

**Administrative Response:**

*DGIRA* continues to evaluate the project without public interference.

**Administrative Response:**

*DGIRA* reports its final resolution.

**Administrative Response:**

*DGIRA* has 5 days from the notification day to consider public request.

**Decision Point:**

Did *DGIRA* accept public request?

**If the answer is yes:**

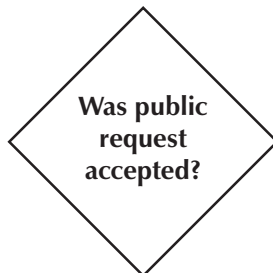
The developer has 5 days from the notification day to publish a summary of the project in a local newspaper.

**If the answer is no:**

*DGIRA* reports final resolution.

**Administrative Procedure:**

The developer has 5 days from the notification day to publish a summary of the project in a local newspaper.





#### **Administrative Response:**

The public has 10 days from the day the summary of the project been published in a local newspaper to request a copy for review.

#### **Decision Point:**

Is public assembly needed?

#### **If the answer is yes:**

*DGIRA* has 5 days to convoke a public assembly.

#### **If the answer is no:**

The public has 20 days to review the project.

#### **Administrative Response:**

*DGIRA* has 5 days to organize a public assembly.

#### **Administrative Response:**

*DGIRA* incorporates the public comments into its resolution.

#### **Administrative Response:**

*DGIRA* notifies the developer of its final resolution.

#### **Administrative Procedure:**

1. Positive resolution: proceed with project.
2. Partial resolution: modify project or incorporate conditions.
3. Negative resolution: choose another site.

### **Summary of Fees and Time Requirements for Environmental Permitting Activities**

The time required for the permitting process is significant. As noted in Table 13, the entire process can last up to 240 business days.

Current regulations establish maximum periods of time for *SEMARNAT* to complete specific administrative procedures, also as noted in Table 13. The fees collected for each procedure are established in special legislation passed every year in conjunction with the passage of the federal budget. The currently available fees are presented in Table 14.

**Table 13: Time Required for DGIRA of SEMARNAT Permitting Procedures**

Assessment, Review and Ruling	Time Period
Preventative Report (IP)	20 business days
Public comments of IP (if required)	65 business days
Environmental Impact Assessment (MIA)	60 business days
Public comments of MIA (if required)	65 business days
Risk Study (ER)	30 business days
<b>Total</b>	<b>240 business days</b>

Source: SEMARNAT

**Table 14: Fees for DGIRA of SEMARNAT Permitting Process**

Administrative Process	Fees in Pesos (July–December 2001)
<i>Reception and Evaluation Fees</i>	
Preventative Report (IP)	3,272
MIA—Regional	13,056
MIA—Particular	6,316
Risk Study (ER)	611–1,890
<i>Authorization Fees</i>	
IP	403
MIA—Regional	1,100
MIA—Particular	741
ER	0
<i>Revalidation Fees</i>	
MIA—Regional	1,444
MIA—Particular	525

Source: SEMARNAT

Fees valid for July–December 2001. Please contact SEMARNAT for updated values. Exchange rate as of 07/11/2001: 9.40Pesos\$/1US\$.

# **APPENDIX 1: SUMMARY OF PERMITTING REQUIREMENTS**





## APPENDIX 1: SUMMARY OF PERMITTING REQUIREMENTS

### Permitting and Administrative Requirements

Description of Permit, Registration or Administrative Procedure	Authority/ Counterpart	Party Responsible for		Financed Public Works Permits				CRE Permit Type			
		Obtaining	Maintaining	T	Sub	I	Ipp	Sel	Co	Im	T
Ownership of land, rights of way, ownership of other project assets											
Ownership of site for project	Current owner	CFE/Developer	Developer				✓	✓	✓		
R/W for electric lines	Current owner	CFE/Developer	Developer				✓	✓	✓		✓
R/W for gas lines (Mexico)	Current owner	CFE/Developer	Developer				✓	✓	✓		
R/W for gas lines (foreign)	Current owner	CFE/Developer	Developer				✓	✓	✓		
R/W for aqueduct	Current owner	CFE/Developer	Developer				✓	✓	✓		
R/W for access road	Current owner	CFE/Developer	Developer				✓	✓	✓		✓
R/W for electric lines (excess)	Current owner	Developer	Developer				✓				
MIA for fuel distribution system	INE	CFE/Developer	Developer				✓	✓	✓		
Federal environmental permits											
Decision on MIA filing	INE	CFE/Developer	Developer				✓	✓	✓		✓
Approval of risk study	INE	CFE/Developer	Developer				✓	✓	✓		✓
Decision on MIAs for additions	INE	Developer	Developer				✓				
Approval of additional risk study	INE	Developer	Developer				✓	✓	✓		✓
Authorization of land use change	SEMARNAT	Developer	Developer				✓	✓	✓		✓
Environmental license	INE	Developer	Developer				✓	✓	✓		✓
Operating license	INE	Developer	Developer				✓	✓	✓		✓
Open-air combustion permit	SEMARNAT	Developer	Developer				✓	✓	✓		
Auth. changes forest zones	SEMARNAT	CFE	CFE	✓		✓					
MIA	INE	CFE	CFE	✓		✓		✓			

Description of Permit, Registration or Administrative Procedure	Authority/ Counterpart	Party Responsible for		Financed Public Works Permits				CRE Permit Type			
		Obtaining	Maintaining	T	Sub	I	Ipp	Sel	Co	Im	T
Federal Water Resource Permits											
Concession title for waster use	CNA	CFE/Developer	Developer								
Registration in APP	CNA	CFE/Developer	Developer								
Certificate for brackish waters	CNA	CFE/Developer	Developer								
Payment of discharge fees	CNA	CFE/Developer	Developer								
Other Federal Authorizations											
Notification to CFC	CFC	Developer	Developer				✓	✓	✓		✓
Hydrostatic tests notification	SE	Developer	Developer				✓	✓	✓		
License to use explosives	SEDENA	Developer/ Contractor	Developer/ Contractor			✓		✓	✓	✓	✓
Highway connection/crossing permit	SCT	Developer	Developer				✓	✓	✓	✓	✓
Permit for radio/satellite comm.	SCT	Developer	Developer				✓	✓	✓	✓	
Railroad crossing permit	SCT	Developer	Developer				✓	✓	✓	✓	
Sanitary license	SS	Developer	Developer				✓	✓	✓	✓	
Register for security and hygiene	STPS	Developer	Developer				✓	✓	✓	✓	
License of operation of machinery	STPS	Developer	Developer				✓	✓	✓	✓	
Register for capacitating/training	STPS	Developer	Developer				✓	✓	✓	✓	
Registration for vapor generators	STPS	Developer	Developer				✓	✓	✓		
Register hoisting and crane equipment	STPS	Developer	Developer				✓	✓	✓	✓	
License for high pressure equipment	STPS	Developer	Developer				✓	✓	✓		
Registration of pressure containers	STPS	Developer	Developer				✓	✓	✓		
Permission of river crossing	CNA	Developer	Developer				✓	✓	✓	✓	
Use of maritime terrestrial zone	SEMARNAT	Developer	Developer				✓	✓	✓	✓	
INAH construction license	INAH	CFE	CFE	✓		✓					
Permission for R/W to cross federal railways, pipelines, roads and communication lines	Municipality, SCT, PEMEX, FFCC	CFE	CFE	✓		✓					
Permission for R/W to abut federal highways, railways or other infrastructure	SCT, State and Municipal Gov.	CFE	CFE	✓		✓					

**Handbook on Environmental Permitting for  
Generation and Transmission Projects in Mexico**

Description of Permit, Registration or Administrative Procedure	Authority/ Counterpart	Party Responsible for		Financed Public Works Permits				CRE Permit Type			
		Obtaining	Maintaining	T	Sub	I	Ipp	Sel	Co	Im	T
Federal Authorizations for Pipe Lines											
Permit to transport gas for own use	CRE	Developer	Developer				✓	✓	✓		
Notice of contingency	CRE	Developer	Developer				✓	✓	✓		
Reporting of accidents	CRE	Developer	Developer				✓	✓	✓		
Program system maintenance	CRE	Developer	Developer				✓	✓	✓		
Registration for supervision and O&M	CRE	Developer	Developer				✓	✓	✓		
State and Municipal Authorizations <sup>18</sup>											
Land use license	Municipality	CFE/Developer/ Contractor	Developer		✓		✓	✓	✓		✓
Construction license	Municipal DPW	Developer	Developer				✓	✓	✓		✓
License to open industrial installation	State Health Secretary	Developer	Developer				✓	✓	✓		
Sanitary license	Municipality	Developer	Developer				✓	✓	✓		
Permit for noise, vibrations and thermal energy (not routine activity)	Municipality	Developer	Developer				✓	✓	✓		
Municipal construction license	Municipal DPW	CFE	CFE	✓		✓		✓			

<sup>18</sup> Note that permission for R/W to cross federal rail ways, pipelines, roads and communication lines must be obtained from the local municipal government and permission for R/W to abut federal highways, rail ways or other infrastructure must be obtained from both the municipal and state governments.

**GLOSSARY**

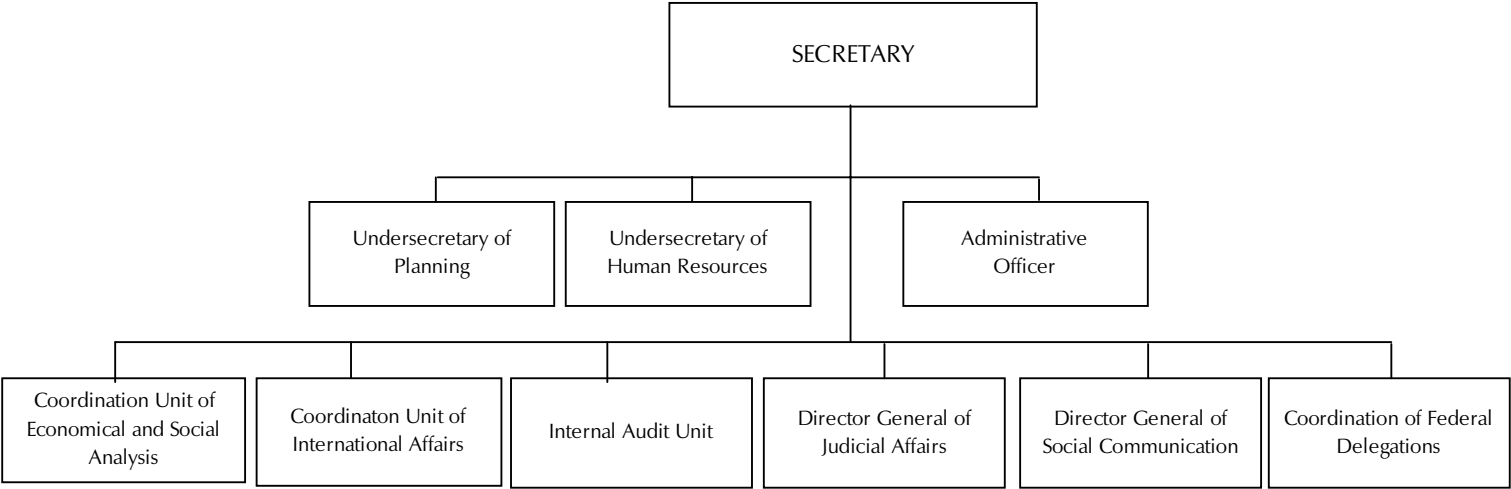
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<b>Cog</b>	Cogeneration
<b>CFC</b>	Federal Competition Commission
<b>CNA</b>	National Commission of Water
<b>CFE</b>	Federal Electricity Commission
<b>CRE</b>	Energy Regulatory Commission
<b>DPW</b>	Department of Public Works
<b>FFCC</b>	National Trains and Railways
<b>IPP</b>	IPP
<b>Im</b>	Importation
<b>INE</b>	National Institute of Ecology
<b>MIA</b>	Environmental Impact Statement
<b>NOM</b>	Mexican Official Standards
<b>O&amp;M</b>	Operations and Maintenance
<b>PEMEX</b>	Petróleos Mexicanos (national oil company)
<b>R/W</b>	Rights of Way
<b>Sub</b>	Substations
<b>SCT</b>	Secretariat of Communication and Transportation
<b>SENER</b>	Energy Secretariat
<b>SE</b>	Secretariat of Economy
<b>SEDENA</b>	Secretariat of National Defense
<b>SEMARNAT</b>	Secretariat of the Environment and Natural Resources
<b>Sel</b>	Self-Supply
<b>SS</b>	Secretariat of Health
<b>STPS</b>	Secretariat of Labor and Social Security

# **APPENDIX 2: ORGANIZATIONAL CHARTS OF MEXICAN GOVERNMENT AGENCIES**



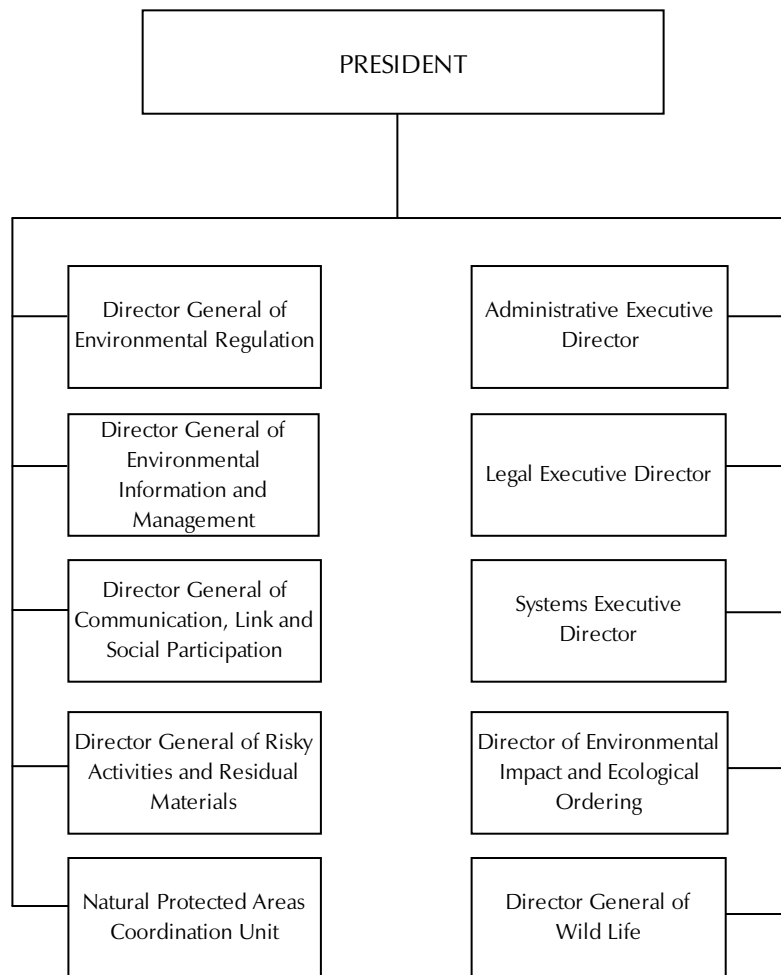
**SECRETARIAT OF ENVIRONMENT AND NATURAL RESOURCES**  
(SEMARNAT)



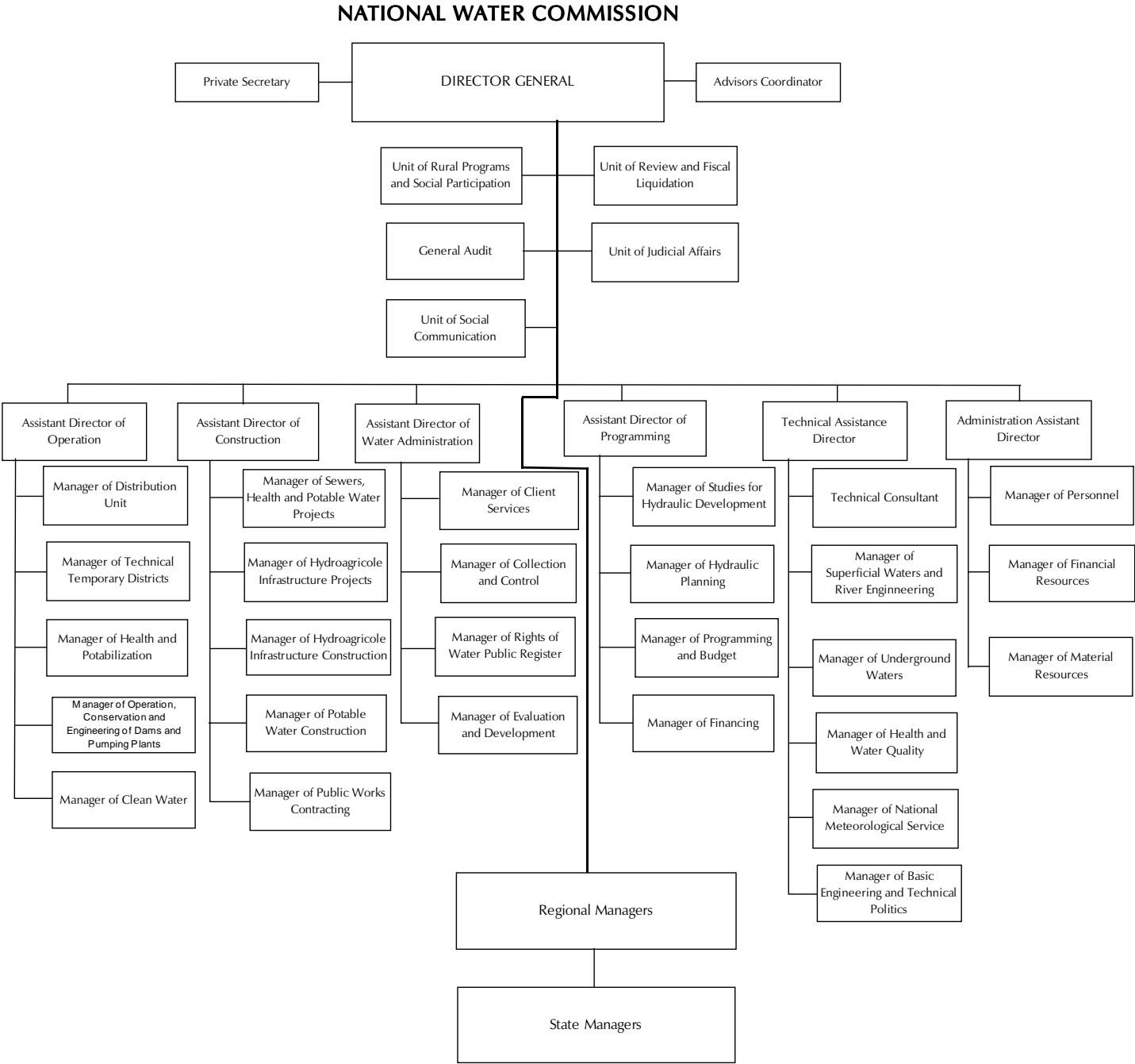
Decentralized Entities:



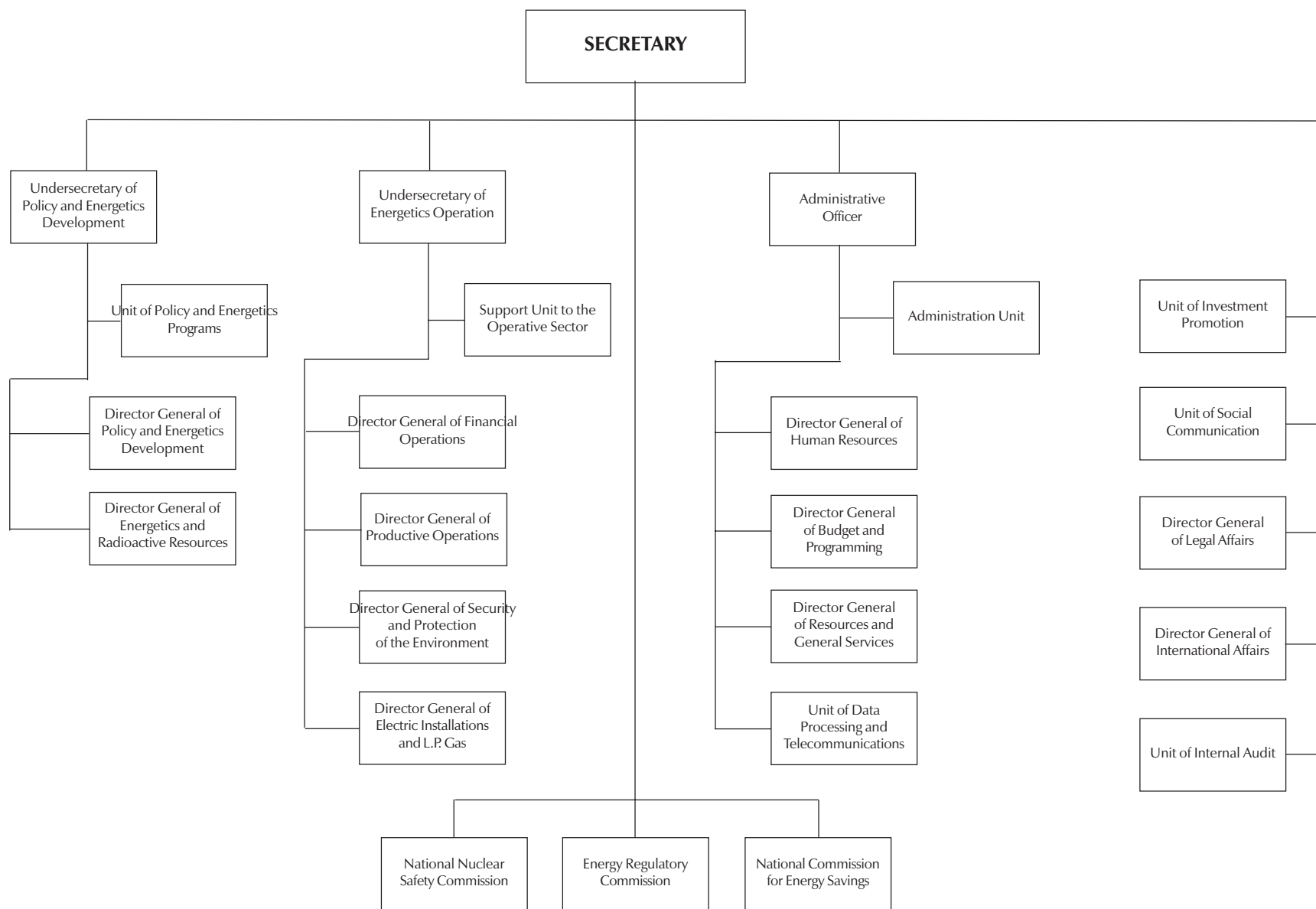
## NATIONAL INSTITUTE OF ECOLOGY



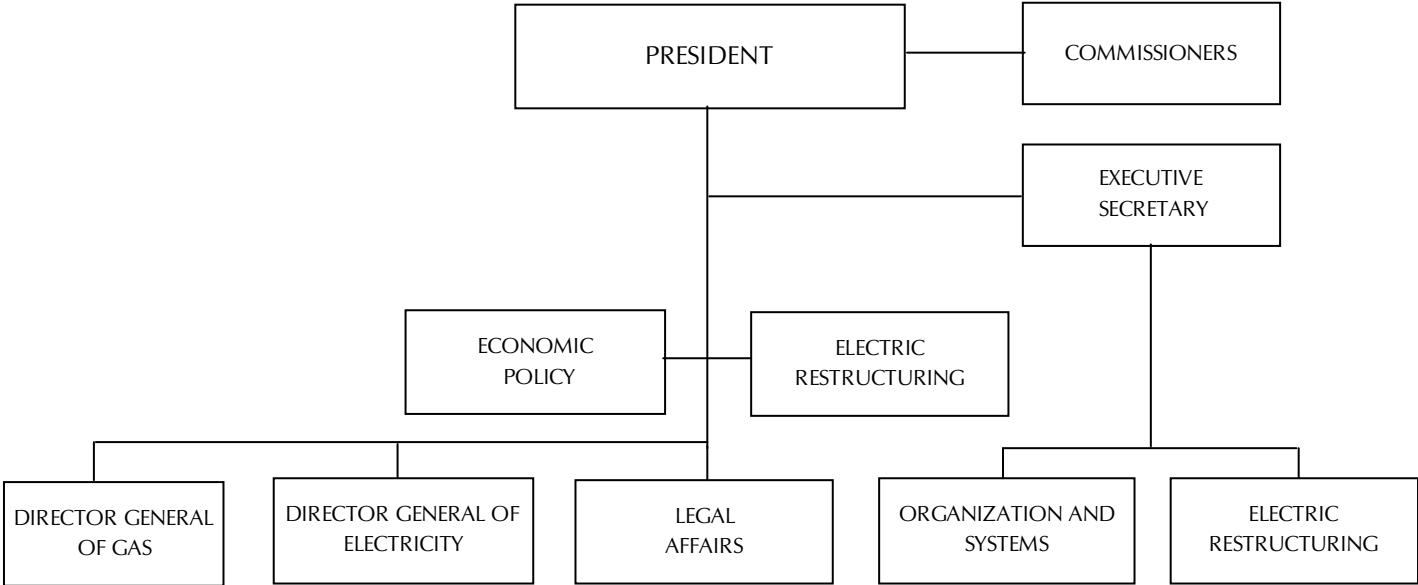




## SECRETARIAT OF ENERGY



**ENERGY REGULATORY COMMISSION (CRE)**





## **APPENDIX 3: DIRECTORY OF MEXICAN GOVERNMENT AGENCIES**



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